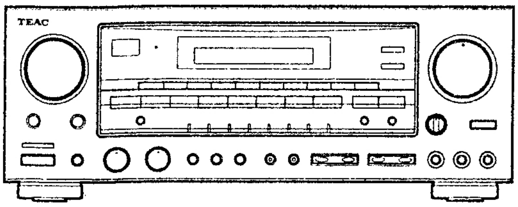

TEAC

SERVICE MANUAL

AG-D9000

Audio/Video Surround Receiver

NOTES

- PC boards shown are viewed from parts side.
- The parts with no reference number or parts number in the exploded views are not supplied.
- As regards the resistors and capacitors, refer to the circuit diagrams contained in this manual.
- ⚠ Parts marked with this sigh are critical components. They must be replaced with identical components - refer to the appropriate parts list and ensure exact replacement.
- Parts of [ ] mark can be used only with the version designated.
  [J] : JAPAN [US] : U.S.A. [C] : CANADA
  [E] : EUROPE [UK] : U.K. [GE] : GENERAL EXPORT

9A07483600

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SPECIFICATIONS

■ Amplifier Section

Sensitivity/Impedance :
PHONO : 2.5 mV/47 k ohms
LINE : 180 mV/47 k ohms
Frequency Response :
PHONO : 50 Hz - 15 kHz
LINE : 10 Hz - 60 kHz
Signal-to-Noise Ratio :
PHONO : 70 dB (IHF-A)
LINE : 90 dB (IHF-A)
Power Output (at 0.05% THD, 1 kHz, 8 ohms):
130 W + 130 W
Tone Control :
BASS : ±10 dB
TREBLE : ±10 dB
Surround Power Output
(4ch Surround Mode/ at 1ch Driven):
Front : 100 W + 100 W (1 kHz, THD 0.1%, 8 ohms)
Rear : 100 W + 100 W (1 kHz, THD 0.5%, 8 ohms)
Pro Logic/6ch Power Output :
Front : 100 W + 100 W (1 kHz, THD 0.1%, 8 ohms)
Center : 100 W (1 kHz, THD 0.1%, 8 ohms)
Rear : 100 W + 100 W (1 kHz, THD 0.5%, 8 ohms)

■ Video Section

Input : 1.0 Vp-p/75 ohms
Output : 1.0 Vp-p/75 ohms

■ General

Power Supply : AC 230 V , 50 Hz
Power Consumption : 350 W
(at 1/8 Power 6% Over Voltage)
AC Outlets : Switched x 2, 100 W max
Dimensions (W x H x D) : 435 x 150 x 345 mm
Weight (net) : 10.7 kg (net)

■ FM Tuner Section

Tuning Range :
87.50 MHz - 108.00 MHz (50 kHz steps)
Sensitivity (S/N 30 dB) : 2.5uV
Total Harmonic Distortion :
Mono : 0.3%
Stereo : 0.5%
Signal-to-Noise Ratio :
Mono : 70 dB
Stereo : 65 dB
Frequency Response : 20 Hz -15 kHz
Image Rejection : 60 dB

■ AM Tuner Section

Tuning Range :
522 kHz - 1,620 kHz (9 kHz steps)
Sensitivity (S/N 20 dB) : 55 dB
Total Harmonic Distortion : 1.5%
Signal-to-Noise Ratio: 40 dB
Image Rejection : 35 dB

■ Standard Accessories :

AM Loop Antenna x 1
FM Lead-Type Antenna x 1
Remote Control Unit (UR-414) x 1
Operator's Manual x 1

- Improvements may result in specifications and features changing without notice.
- Illustrations may differ slightly from production models.

MEASUREMENTS AND ADJUSTMENT

■ ALIGNMENT INSTRUCTIONS

EQUIPMENT NEEDED :

AM Signal Generator
FM Signal Generator
Oscilloscope
VTVM(AC, DC)
Test loop antenna (AM Adjustment)
Dummy antenna (FM Adjustment)
Distortion analyser

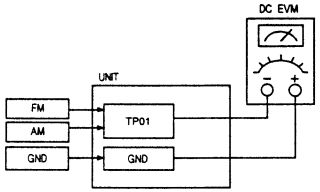
IMPORTANT

1. Check power-source voltage.
2. Set the function switch to band aligned.
3. Keep the signal input as low as possible to adjust accurately.
4. Modulation and modulation frequency.

Item Band	Modulation	Modulation frequency
AM	30%	400 Hz
FM	100% (75 kHz Dev.)	400 Hz

1. TUNING FREQUENCY RANGE ADJUSTMENTS

(FM/AM) DC VOLTMETER .... CONNECT TO TEST POINT TP01 and GND

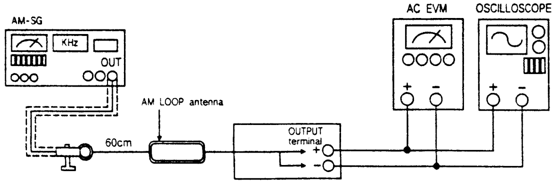


NO.	Band	Frequency	Adjust for	Adjustment
1	FM [J]	87.50MHz (76.00MHz)	1.6V (1.6V)	L7 (L7)
2	AM [CSA]	522KHz (530KHz)	1V (1V)	L105 (L105)

2. AM RF TRACKING ADJUSTMENT

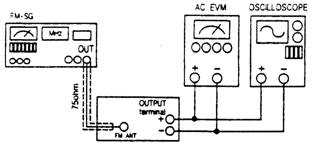
Signal Generator .... Connects to the AM ANT. Coil through the loop antenna.
Adjust for the indication of VTVM of the wave form of scope to be maximum.

BAND	Step	Frequency	Adjust for	Adjustment
AM	1	612KHz	Maximum sensitivity	L104, T100
	[CSA]	(610KHz)	Maximum sensitivity	L104, T100
	2	1503KHz	Maximum sensitivity	CT11
	[CSA]	(1510KHz)	Maximum sensitivity	CT11
	3	Repeat steps 1 and 2 several times.		



3. FM-RF TRACKING ADJUSTMENT

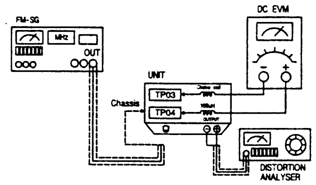
Signal Generator .... Connect to FM ANT JACK (FM IN) through the dummy.



NO.	Frequency	Adjust for	Adjustment
1	90.10MHz	Maximum Sensitivity	L2, L5, L6
[J]	(77.00MHz)	Maximum Sensitivity	L2, L5, L6
2	Repeat steps 1 and 2 several times.		

4. FM MONO DISTORTION ADJUSTMENT

DC VOLTMETER..............Connect to TP03(-), TP04(+) through the chock coil (100uH).
Signal Generator ....Connect to FM ANT Jack (FM IN) through the dummy.
Distortion Meter..............Connect to the output.



NO.	Frequency	Adjust for	Adjustment
1	100.10MHz	DC Voltmeter 0V	T101
[J]	(83.10MHz)	DC Voltmeter 0V	T101
2	100.10MHz	DC Voltmeter 0V	T101
[J]	(83.10MHz)	Minimum T.H.D	T101
3	Repeat steps 1 and 2 several times.		

5. FM/AM AUTO STOP LEVEL ADJUSTMENT (1st AM BAND, 2nd FM BAND)

FM Signal Generator...........Connect to FM ANT Jack (FM IN) through the dummy.
AM Signal Generator..........Connect to AM ANT. Coil through the Loop antenna.

BAND	Step	Signal Generator	Adjust for	Adjustment
AM	1	999KHz 88dB	TUNED Display ON	VR12
	2	999KHz 87dB	TUNED Display OFF	VR12
FM	1	100.1MHz 26dB	TUNED Display ON	VR11
	[J]	(83.10MHz 26dB)	TUNED Display ON	VR11
	2	100.1MHz 25dB	TUNED Display OFF	VR11
	[J]	(83.10MHz 25dB)	TUNED Display OFF	VR11

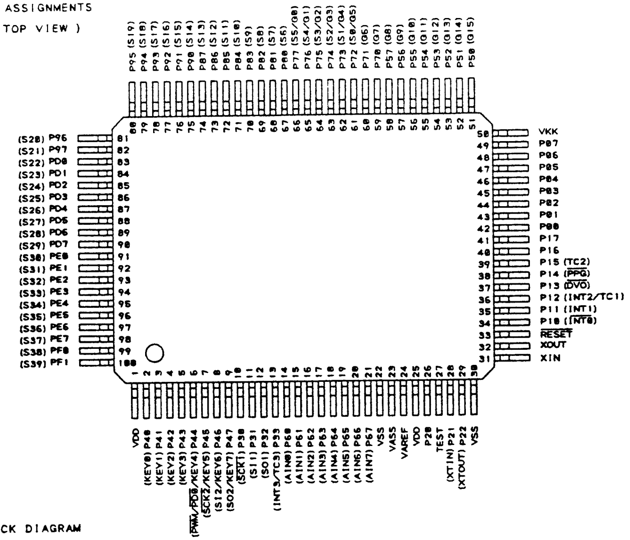
6. ADJUSTMENT POINT DIAGRAM .... Refer to 22 page

IC PIN FUNCTION (u-COM ANAM1269AT, TMP87PM78F)

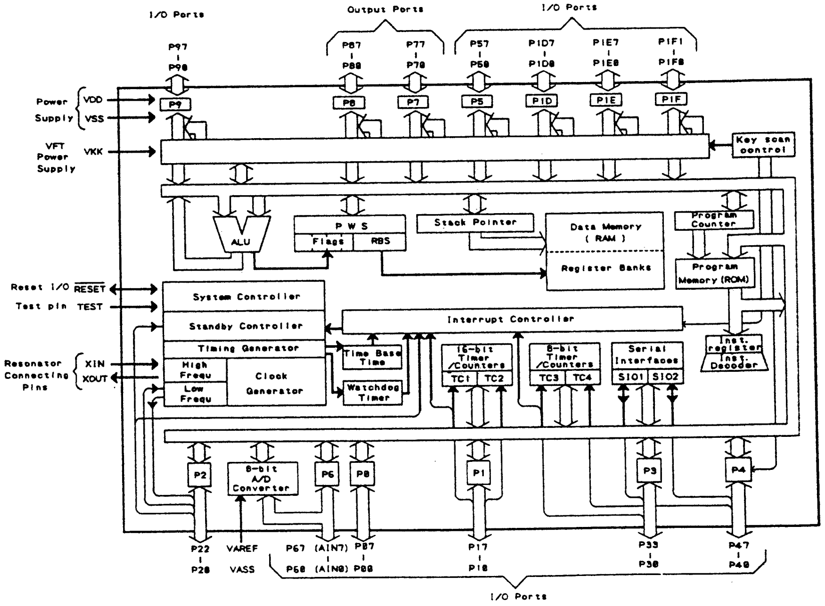
PIN No.	SYMBOL	I/O	DESCRIPTION
1,25	VDD	-	POWER SUPPLY (+5V)
2	Function Clock	O	Function IC, Dolby IC Serial Clock Output Port
3	Function Data	O	Function IC, Dolby IC Serial Data Output Port
4	Dolby Request	O	Dolby IC (NJW1103/M62460FP) Request Port
5	Function Strobe	O	Function IC (NJU7311/NJU7312,NJU7313) Strobe Port
6	Power On/Off	O	Power On/Off Control Output
7	PLL CE	O	PLL IC (LM7001) Control Port
8	PLL Clock	O	
9	PLL Data	O	
10	FM (L)	O	FM Band Control Output
11	Mono (H)	O	Mono Control Output
12	RDS Data	I	RDS IC (TDA7330) Control Port
13	RDS Clock	I	
14	Stereo IN (L)	I	Stereo Display Control Input
15	TUNED IN (L)	I	Tuned Display Control Input
16	Headphone IN (L)	I	Headphone Jack Input
17~21	KEY Input	I	Resistor Divide Key control Input
22,30	Vss	-	Device GND Port
23	Vass	-	Device Analoge GND Port
24	Varef	-	A/D Convertor Reference Voltage
26	BACK UP	I	Back Up Mode Control Input
27	Test	-	NC (GND)
28,29	Function Selector	I	Encoder Data Input
31	X IN	I	8MHz Cystal Connection Port
32	X OUT	O	
33	RESET (L)	I	Reset Input
34	REMOTE IN	I	Remote Control Sensor Data Input
35	BUS IN	I	System Remote Control Input
36	BUS OUT	O	System Remote Control Output
37	Trim Strobe	O	Trim IC (KIC9299) Strobe Port
38	Tuner Mute (H)	O	Tuner Mute Control Output
39	Surround On (L)	O	Surround On/Off Control Output
40	Volume Down (H)	O	Master Volume Up/Down Control Output
41	Volume Up (H)	O	
42	Video 1 Mute (L)	O	Video 1 Mute Control Output
43	Tape 1 Mute (L)	O	Tape 1 Mute Control Output
44	Function Mute (H)	O	Function Mute Control Output
45	Video B	O	Video IC (NJM2279) Control Output
46	Video A	O	
47	Extended Strobe	O	Extended IC (NJU3713) Control Port
48	Extended Data	O	
49	Extended Clock	O	
50	FIP Vkk	-	FIP (FLT) -28V Negative Power Supply For FIP Blinking
51~61	FIP Grid	O	FIP (FLT) Grid Control Outputs
62~82	FIP Segment	O	FIP (FLT) Segment Control Outputs
83~87	NC	-	No connection
88	Video 3/6ch Led	O	Video 3/DVD 6ch Function LED port
89	Video 3/2ch Option (L)	I	Video 3/DVD 2ch Option Port
90	Video 1 Mute (H)	I	Video 1 REC Out Mute control Port
91	Tape 1 Mute (H)	I	Tape 1 REC Out Mute control Port
92	Source Direct (H)	I	Source direct control Port
93	SPK B (H)	O	Speaker B Driver Output
94	SPK A (H)	O	Speaker A Driver Output
95~97	Area Option	I	Area Option Port
98	Video 3/6ch Option (H)	I	Video 3/DVD 6ch Option Port
99	Protect In (L)	I	Protect Input
100	Power Mute (H)	O	Power Mute Control Output

Micom IC Pin Assignment & Block Diagram

■PIN ASSIGNMENTS
(TOP VIEW)

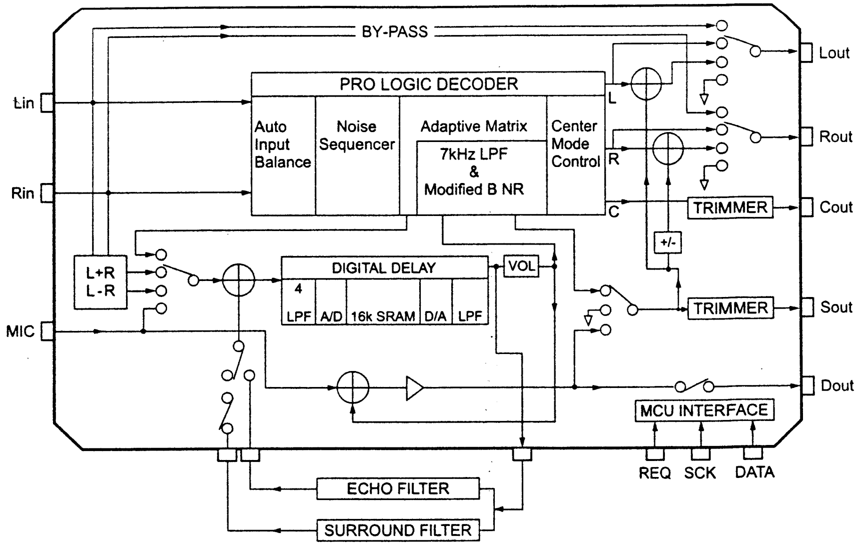

(S20) P96 81
(S21) P97 82
(S22) PD0 83
(S23) PD1 84
(S24) PD2 85
(S25) PD3 86
(S26) PD4 87
(S27) PD5 88
(S28) PD6 89
(S29) PD7 90
(S30) PE0 91
(S31) PE1 92
(S32) PE2 93
(S33) PE3 94
(S34) PE4 95
(S35) PE5 96
(S36) PE6 97
(S37) PE7 98
(S38) PF0 99
(S39) PF1 100
50 VKK
49 P07
48 P06
47 P05
46 P04
45 P03
44 P02
43 P01
42 P00
41 P17
40 P16
39 P15 (TC2)
38 P14 (PPG)
37 P13 (DVO)
36 P12 (INT2/TC1)
35 P11 (INT1)
34 P10 (INT0)
33 RESET
32 XOUT
31 XIN

■BLOCK DIAGRAM


I/O Ports
Output Ports
I/O Ports
P97
P90
P87
P80
P77
P70
P57
P50
PID7
PID0
PIE7
PIE0
PIF1
PIF0
Power Supply
VDD
VSS
VFT Power Supply
VKK
Key scan control
ALU
P W S
Flags
RBS
Stack Pointer
Data Memory (RAM)
Register Banks
Program Counter
Program Memory (ROM)
Reset I/O
RESET
Test pin
TEST
System Controller
Standby Controller
Timing Generator
Interrupt Controller
Resonator Connecting Pins
XIN
XOUT
High Frequ
Low Frequ
Clock Generator
Time Base Timer
Watchdog Timer
16-bit Timer /Counters
TC1
TC2
8-bit Timer /Counters
TC3
TC4
Serial Interfaces
SIO1
SIO2
Inst. register
Inst. Decoder
P2
8-bit A/D Converter
P6
P8
P1
P3
P4
P22
P20
VAREF
VASS
P67 (AIN7)
P60 (AIN0)
P87
P80
P17
P10
P33
P30
P47
P40
I/O Ports

IC PIN FUNCTION (Dolby IC : NJW1103/M62460FP)

■ SYSTEM BLOCK DIAGRAM

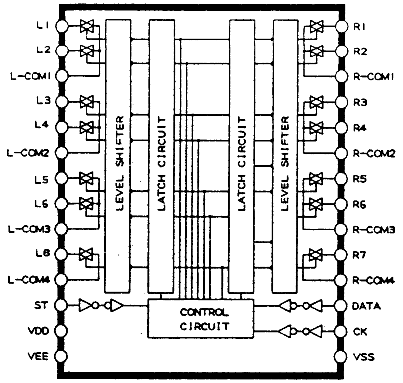


BY-PASS
Lin
Rin
MIC
Lout
Rout
Cout
Sout
Dout
PRO LOGIC DECODER
Auto Input Balance
Noise Sequencer
Adaptive Matrix
7kHz LPF & Modified B NR
Center Mode Control
L
R
C
TRIMMER
+/-
TRIMMER
L+R
L-R
DIGITAL DELAY
VOL
4
LPF
A/D
16k SRAM
D/A
LPF
MCU INTERFACE
REQ
SCK
DATA
ECHO FILTER
SURROUND FILTER

No.	Name	No.	Name	No.	Name	No.	Name
1	NGC 1	21	X IN	41	VOL OUT	61	RLC4
2	LOUT	22	X OUT	42	DELAYSIG IN	62	RLC7
3	ROUT	23	DVSS	43	DELAYSIG OUT	63	RLC3
4	CT	24	AVSS	44	FBIN EC	64	RLC8
5	COUT	25	AVDD	45	FBIN SU	65	RLC6
6	ST	26	VREFD	46	S'OUT	66	LLI
7	SOUT	27	MIX OUT	47	DBIN	67	LBPF
8	CMC	28	DELAY IN	48	LPIN	68	RLI
9	SMRO	29	LPF1 IN1	49	DBC1	69	RBPF
10	SMRI	30	LPF1 IN2	50	DBC2	70	LT
11	AGND	31	LPF1 OUT	51	DBC3	71	RT
12	MIC IN	32	AD INT IN	52	PCS3	72	LIN
13	DVDD	33	AD INT OUT	53	PCS6	73	RIN
14	TEST CNT	34	DA CONT	54	PCS2	74	HOLDC
15	DATA	35	AD CONT	55	PCS5	75	AVCC
16	SCK	36	DA INT IN	56	PCS1	76	VREFA
17	REQ	37	DA INT OUT	57	PCS4	77	VREFG
18	LO1	38	LPF2 IN1	58	RLC5	78	IREF
19	LO2	39	LPF2 IN2	59	RLC2	79	NGC3
20	LO3	40	LPF2 OUT	60	RLC1	80	NGC2

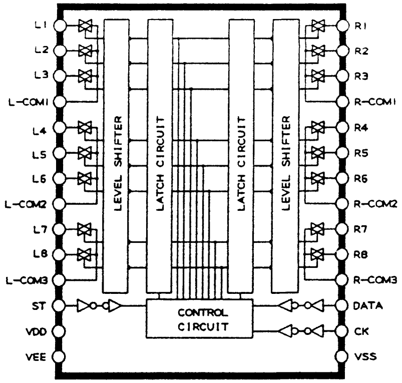
IC Block Diagram

NJU7311 (FUNCTION SELECTION/INPUT IC22)



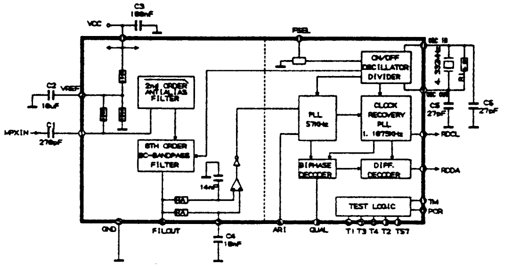
L1
L2
L-COM1
L3
L4
L-COM2
L5
L6
L-COM3
L8
L-COM4
ST
VDD
VEE
R1
R2
R-COM1
R3
R4
R-COM2
R5
R6
R-COM3
R7
R-COM4
DATA
CK
VSS
LEVEL SHIFTER
LATCH CIRCUIT
LATCH CIRCUIT
LEVEL SHIFTER
CONTROL CIRCUIT

NJU7312 (FUNCTION SELECTION/INPUT IC24)



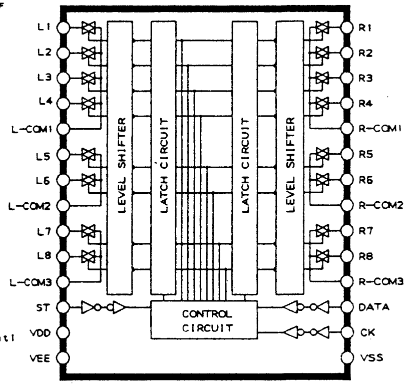
L1
L2
L3
L-COM1
L4
L5
L6
L-COM2
L7
L8
L-COM3
ST
VDD
VEE
R1
R2
R3
R-COM1
R4
R5
R6
R-COM2
R7
R8
R-COM3
DATA
CK
VSS
LEVEL SHIFTER
LATCH CIRCUIT
LATCH CIRCUIT
LEVEL SHIFTER
CONTROL CIRCUIT

TDA7330BD (RDS DECODER/TUNER IC18) RDS ONLY



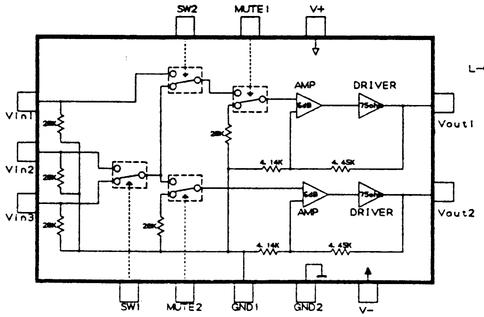
VCC
C3 100nF
PSEL
ON/OFF OSCILLATOR DIVIDER
2nd ORDER ANTIALIAS FILTER
C2 VREF
MPXIN
C1 270pF
PLL 57kHz
CLOCK RECOVERY PLL 1.1875kHz
8TH ORDER BC-BANDPASS FILTER
BIPHASE DECODER
DIFF. DECODER
TEST LOGIC
C5 27pF
RDCL
RDDA
GND
FILOUT
C6
ARI
QUAL
T1 T3 T4 T2 TST

NJU7313 (FUNCTION SELECTION/INPUT IC23)



L1
L2
L3
L4
L-COM1
L5
L6
L-COM2
L7
L8
L-COM3
ST
VDD
VEE
R1
R2
R3
R4
R-COM1
R5
R6
R-COM2
R7
R8
R-COM3
DATA
CK
VSS
LEVEL SHIFTER
LATCH CIRCUIT
LATCH CIRCUIT
LEVEL SHIFTER
CONTROL CIRCUIT

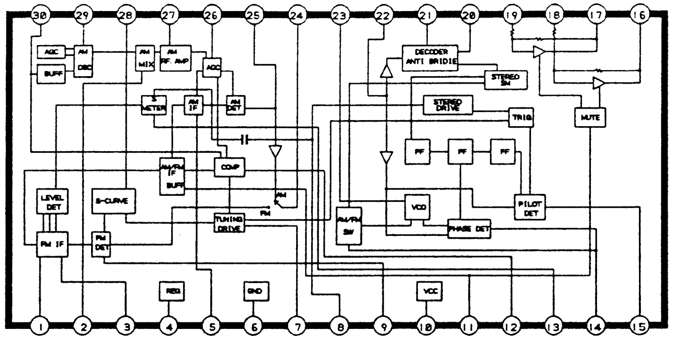
NJM2279D (VIDEO CONTROL/INPUT IC48)



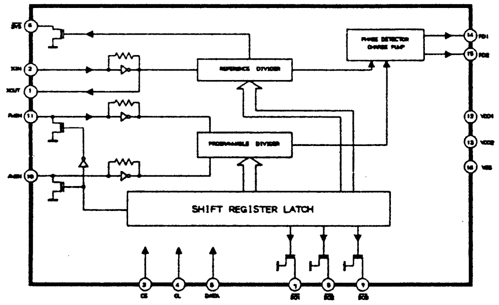
SW2
MUTE1
V+
Vin1
Vin2
Vin3
28K
AMP
DRIVER
75ohm
6dB
4.14K
4.45K
Vout1
Vout2
SW1
MUTE2
GND1
GND2
V-

IC Block Diagram

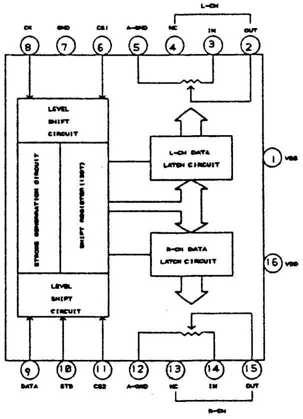
LA1836M (MPX + IF/TUNER IC12)


30
29
28
27
26
25
24
23
22
21
20
19
18
17
16
AGC
AM OSC
BUFF
AM MIX
AM RF. AMP
AGC
S METER
AM IF
AM DET
AM/FM IF BUFF
COMP
AM
FM
LEVEL DET
S-CURVE
TUNING DRIVE
FM IF
FM DET
REG
GND
DECODER ANTI BRIDIE
STEREO SW
STEREO DRIVE
TRIG
MUTE
FF
FF
FF
VCO
PILOT DET
AM/FM SW
PHASE DET
VCC
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

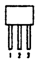
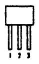
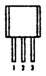
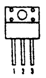
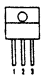
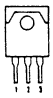
LM7001 (PLL SYNTHESIZER/TUNER IC11)


XIN
XOUT
FMIN
AMIN
PHASE DETECTOR CHARGE PUMP
PD1
PD2
REFERENCE DIVIDER
PROGRAMMABLE DIVIDER
VDD1
VDD2
VSS
SHIFT REGISTER LATCH
CE
CL
DATA

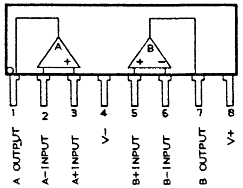
KIC9299P (TRIM IC/INPUT IC34, 35)


L-CH
CK
GND
CS1
A-GND
NC
IN
OUT
8
7
6
5
4
3
2
LEVEL SHIFT CIRCUIT
STROBE GENERATION CIRCUIT
SHIFT REGISTER (13BIT)
L-CH DATA LATCH CIRCUIT
R-CH DATA LATCH CIRCUIT
LEVEL SHIFT CIRCUIT
1
VSS
16
VDD
9
10
11
12
13
14
15
DATA
STB
CS2
A-GND
NC
IN
OUT
R-CH

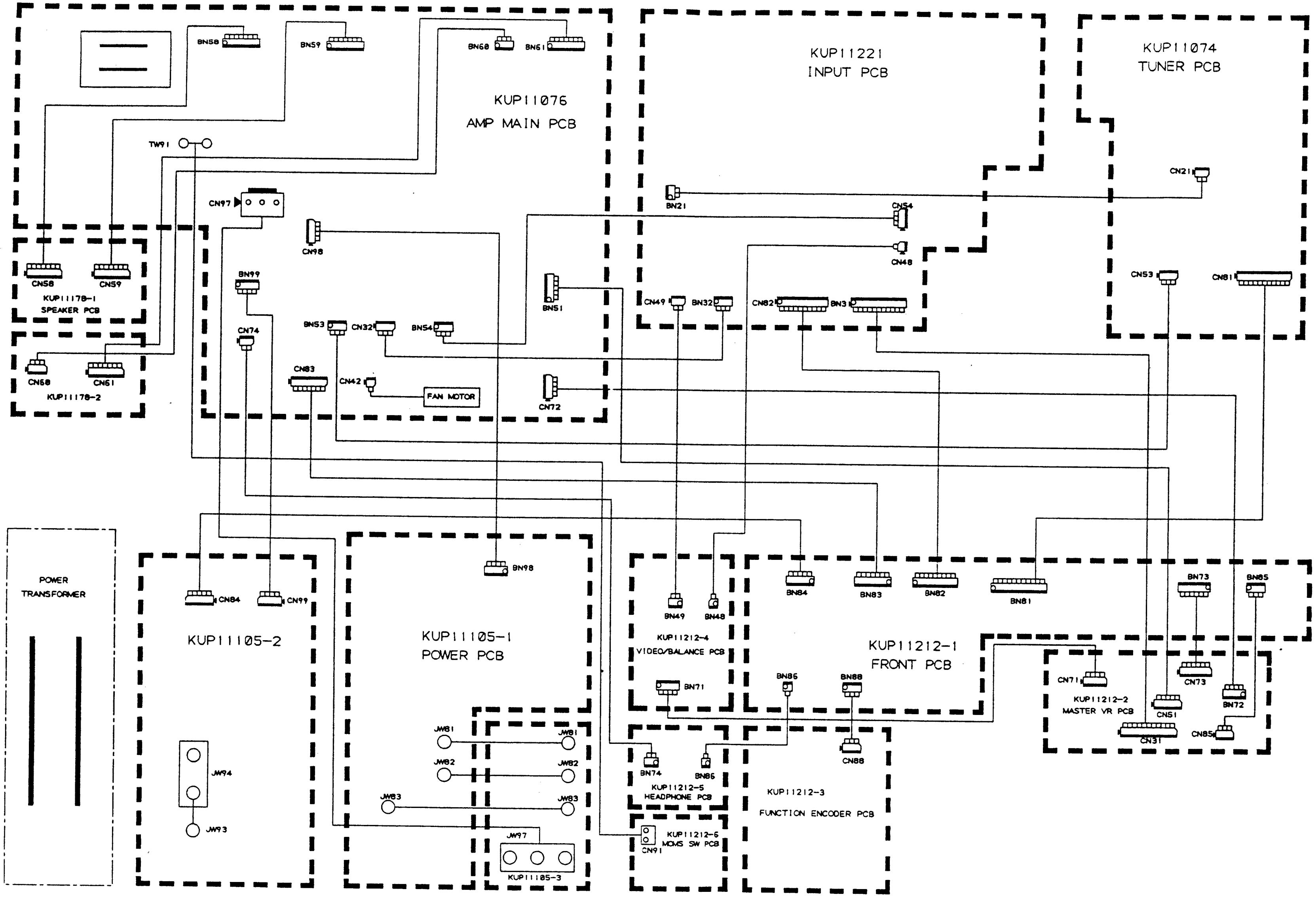
TRANSISTOR BLOCK DIAGRAM

TO-92L  1. Emitter 2. Collector 3. Base KSA1175Y KSB811Y KSD1021Y KSAC2785Y KTA114Y KTA144E KTC114Y KTC144T KTC3192 KTA1271Y	TO-92  1. Emitter 2. Collector 3. Base KTD1302T KTC3228Y KTC3200GR	TO-92L  1. Emitter 2. Collector 3. Base KSA916Y KSC2316Y
TO-220  1. Emitter 2. Collector 3. Base KTA1659AY KTC4370AY 2SD2058	TO-220  1. Emitter 2. Collector 3. Base KSA614Y MC7812C KSD288Y MC7912C	T0-3P  1. Emitter 2. Collector 3. Base 2SC3856 2SC4468 2SA1492 2SA1695

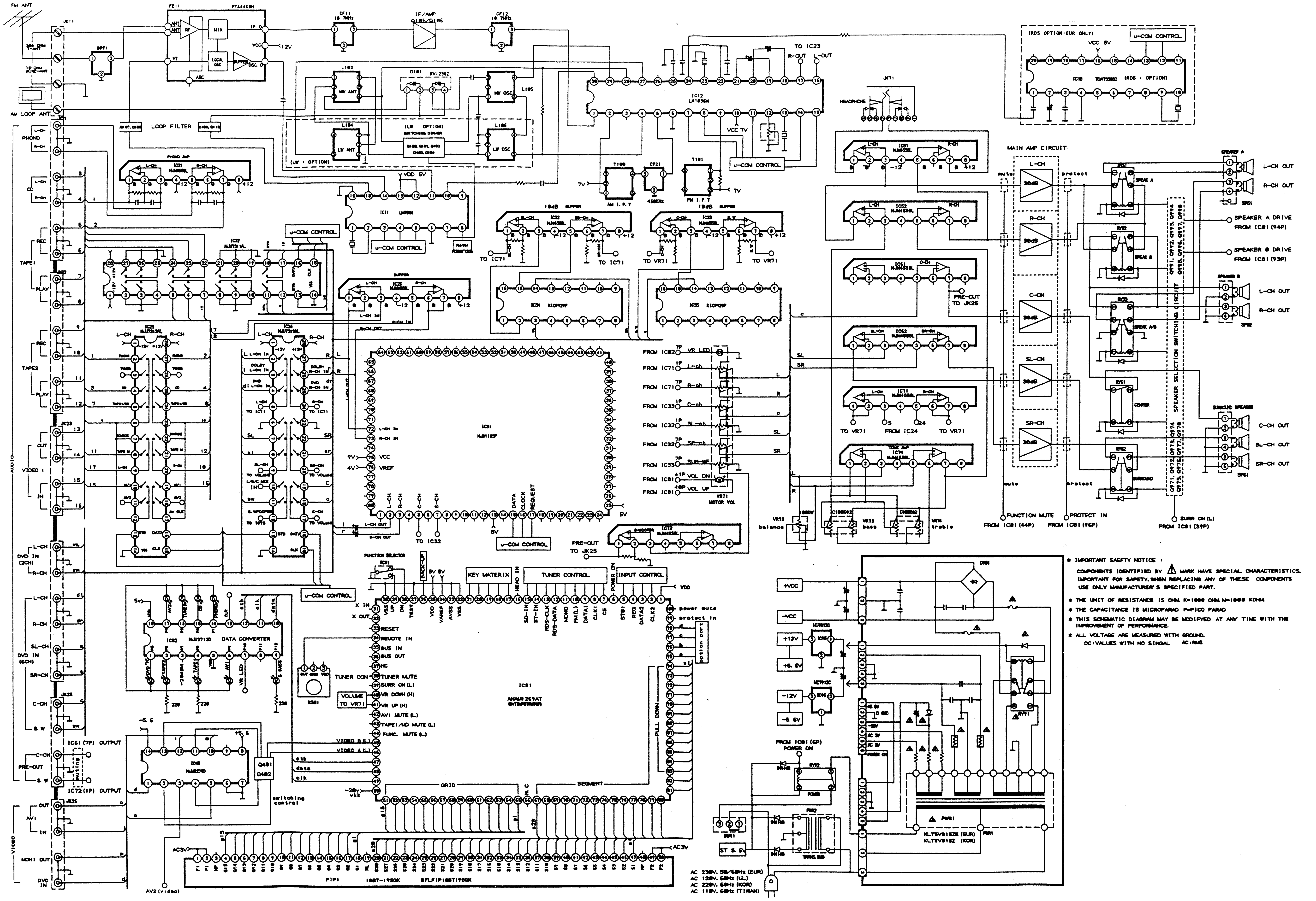
NJM4556AL [NUM4558 (9) L] BLOCK DIAGRAM


A
B
+
+
−
1
2
3
4
5
6
7
8
A OUTPUT
A−INPUT
A+INPUT
V−
B+INPUT
B−INPUT
B OUTPUT
V+

WIRING DIAGRAM


BN58
BN59
BN60
BN61
KUP11076
AMP MAIN PCB
TW91
CN97
CN98
BN99
CN74
BN53
CN32
BN54
BN51
CN83
CN42
FAN MOTOR
CN72
CN58
CN59
KUP11178-1
SPEAKER PCB
CN68
CN61
KUP11178-2
KUP11221
INPUT PCB
BN21
CN54
CN48
CN49
BN32
CN82
BN3
KUP11074
TUNER PCB
CN21
CN53
CN81
POWER
TRANSFORMER
CN84
CN99
KUP11105-2
JW94
JW93
BN98
KUP11105-1
POWER PCB
JW81
JW82
JW83
JW81
JW82
JW83
JW97
KUP11105-3
BN49
BN48
KUP11212-4
VIDEO/BALANCE PCB
BN71
BN84
BN83
BN82
BN81
BN73
BN85
KUP11212-1
FRONT PCB
BN86
BN88
CN71
CN73
KUP11212-2
MASTER VR PCB
CN51
BN72
CN85
CN31
BN74
BN86
KUP11212-5
HEADPHONE PCB
CN88
KUP11212-3
FUNCTION ENCODER PCB
CN91
KUP11212-6
MOMS SW PCB

BLOCK DIAGRAM


FM ANT
AM LOOP ANT
FE11
FTA4458H
MIX
LOCAL OSC
CF11
IF/AMP Q105/Q106
CF12
L103
MW ANT
L104
LW ANT
D101 KV1236Z
L105
MW OSC
L106
LW OSC
(LW : OPTION)
SWITCHING DRIVER
(LW : OPTION)
LOOP FILTER
IC12 LA1836M
TO IC23
R-OUT
L-OUT
VCC TV
u-COM CONTROL
T100
CF21
T101
AM I.F.T
450KHz
FM I.F.T
(RDS OPTION:EUR ONLY)
VCC 5V
IC18
(RDS : OPTION)
JK71
HEADPHONE
PHONO
CD
TAPE1
REC
PLAY
TAPE2
VIDEO 1
OUT
IN
AUDIO
PHONO AMP
IC21 NJM4558L
L-CH
R-CH
IC11 LM7001
VDD 5V
IC22 NJU7313AL
IC23 NJU7313AL
IC24 NJU7313AL
IC25 NJM4558L
BUFFER
IC32 NJM4558L
IC33 NJM4558L
18dB BUFFER
IC34 KIC9274P
IC35 KIC9274P
TO IC71
TO VR71
IC31 NJM1105F
VCC
VREF
DATA
CLOCK
REQUEST
FROM IC82
FROM IC71
FROM IC33
FROM IC32
FROM IC81
VR LED
VOL DN
VOL UP
VR71 MOTOR VOL
IC72 NJM4558L
S-WOOFER
PRE-OUT TO JK25
VR72 balance
VR73 bass
VR74 treble
IC51 NJM4558L
IC52 NJM4558L
IC61 NJM4558L
IC62 NJM4558L
IC71 NJM4558L
TONE AMP IC74 NJM4558L
PRE-OUT TO JK25
TO VR71
FROM IC24
MAIN AMP CIRCUIT
L-CH
R-CH
C-CH
SL-CH
SR-CH
30dB
mute
protect
SPEAKER SELECTION SWITCHING CIRCUIT
SPEAKER A
L-CH OUT
R-CH OUT
SPEAKER A DRIVE FROM IC81 (94P)
SPEAKER B DRIVE FROM IC81 (93P)
SPEAKER B
SURROUND SPEAKER
C-CH OUT
SL-CH OUT
SR-CH OUT
FUNCTION MUTE FROM IC81 (44P)
PROTECT IN FROM IC81 (96P)
SURR ON (L) FROM IC81 (39P)
DVD IN (2CH)
DVD IN (6CH)
L-CH
R-CH
SL-CH
SR-CH
C-CH
S.W
IC82 NJU3713D
DATA CONVERTER
IC61 (7P) OUTPUT
PRE-OUT
IC72 (1P) OUTPUT
IC80 NJM2270D
Q481
Q482
switching control
VIDEO
AV1
MONI OUT
DVD IN
AV2 (video)
FUNCTION SELECTOR
BACK-UP
KEY MATERIX
TUNER CONTROL
INPUT CONTROL
u-COM CONTROL
IC81
ANAM1269AT
RESET
REMOTE IN
BUS IN
BUS OUT
NC
TUNER CON
TUNER MUTE
SURR ON (L)
VR DOWN (H)
VR UP (H)
AV1 MUTE (L)
TAPE1/MD MUTE (L)
FUNC. MUTE (L)
VIDEO B (L)
VIDEO A (L)
stb
data
clk
VOLUME TO VR71
RS81
GRID
SEGMENT
PULL DOWN
power mute
protect in
option port
FIP1
16BT-195GK
BPLFIP16BT195GK
AC3V
+VCC
-VCC
+12V
+5.6V
-12V
-5.6V
IC91
IC92
D901
RY91
FROM IC81 (6P) POWER ON
RY92
POWER
SW91
ST 5.6V
TRANS.SUB
PWR1
KLTEV815EZE (EUR)
KLTEV815Z (KOR)
AC 230V, 50/60Hz (EUR)
AC 120V, 60Hz (UL)
AC 220V, 60Hz (KOR)
AC 110V, 60Hz (TIWAN)

* IMPORTANT SAEFTY NOTICE :

COMPONENTS IDENTIFIED BY ⚠ MARK HAVE SPECIAL CHARACTERISTICS.
IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS
USE ONLY MANUFACTURER'S SPECIFIED PART.

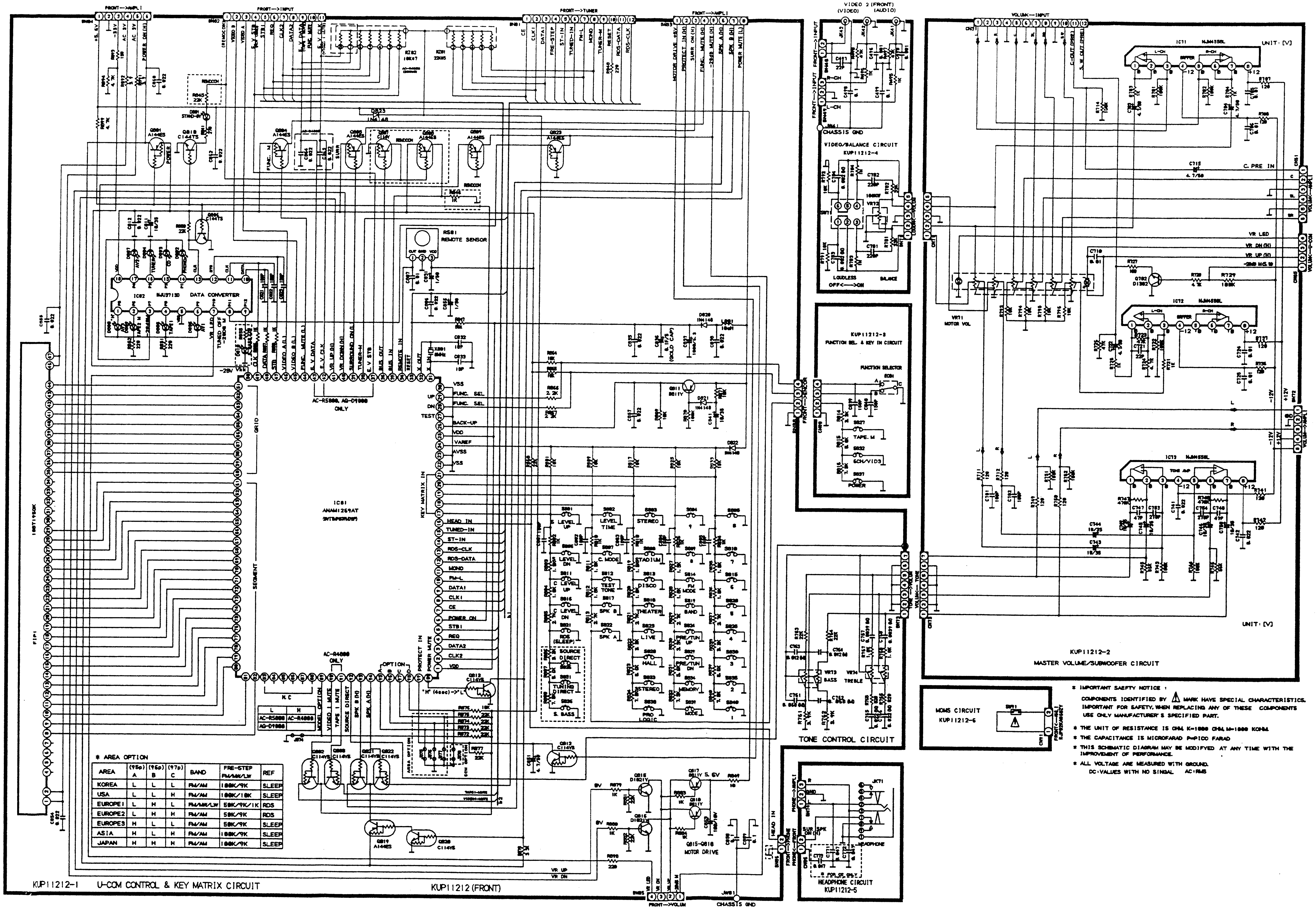
* THE UNIT OF RESISTANCE IS OHM. K=1000 OHM, M=1000 KOHM

* THE CAPACITANCE IS MICROFARAD P=PICO FARAD

* THIS SCHEMATIC DIAGRAM MAY BE MODIFYED AT ANY TIME WITH THE IMPROVEMENT OF PERFORMANCE.

* ALL VOLTAGE ARE MEASURED WITH GROUND.
DC:VALUES WITH NO SINGAL AC:RMS

SCHEMATIC DIAGRAM


FRONT—>AMPLI
FRONT—>INPUT
FRONT—>TUNER
VIDEO 2 (FRONT)
(VIDEO) (AUDIO)
VOLUME—>INPUT
RS81 REMOTE SENSOR
IC82 NJU3713D DATA CONVERTER
IC81 ANAM1269AT
GRID
SEGMENT
KEY MATRIX IN
AC-R5000, AG-D1000 ONLY
AC-R4000 ONLY
N.C
CHASSIS GND
VIDEO/BALANCE CIRCUIT
KUP11212-4
LOUDLESS OFF<——>ON
BALANCE
KUP11212-3
FUNCTION SEL. & KEY IN CIRCUIT
FUNCTION SELECTOR
IC11 NJM4558L
IC12 NJM4558L
IC13 NJM4558L
UNIT: [V]
C. PRE IN
VR LED
VR71 MOTOR VOL
TONE CONTROL CIRCUIT
VR73 BASS
VR74 TREBLE
KUP11212-2
MASTER VOLUME/SUBWOOFER CIRCUIT
MDMS CIRCUIT
KUP11212-6
Q815-Q818 MOTOR DRIVE
HEADPHONE CIRCUIT
KUP11212-5
FRONT—>VOLUM
CHASSIS GND
KUP11212-1 U-COM CONTROL & KEY MATRIX CIRCUIT
KUP11212 (FRONT)

L	H
AC-R5000	AC-R4000
AG-D1000	

* AREA OPTION

AREA	(95p) A	(96p) B	(97p) C	BAND	FRE-STEP FM/MW/LW	REF
KOREA	L	L	L	FM/AM	100K/9K	SLEEP
USA	L	L	H	FM/AM	100K/10K	SLEEP
EUROPE1	L	H	L	FM/MW/LW	50K/9K/1K	RDS
EUROPE2	L	H	H	FM/AM	50K/9K	RDS
EUROPE3	H	L	L	FM/AM	50K/9K	SLEEP
ASIA	H	L	H	FM/AM	100K/9K	SLEEP
JAPAN	H	H	H	FM/AM	100K/9K	SLEEP

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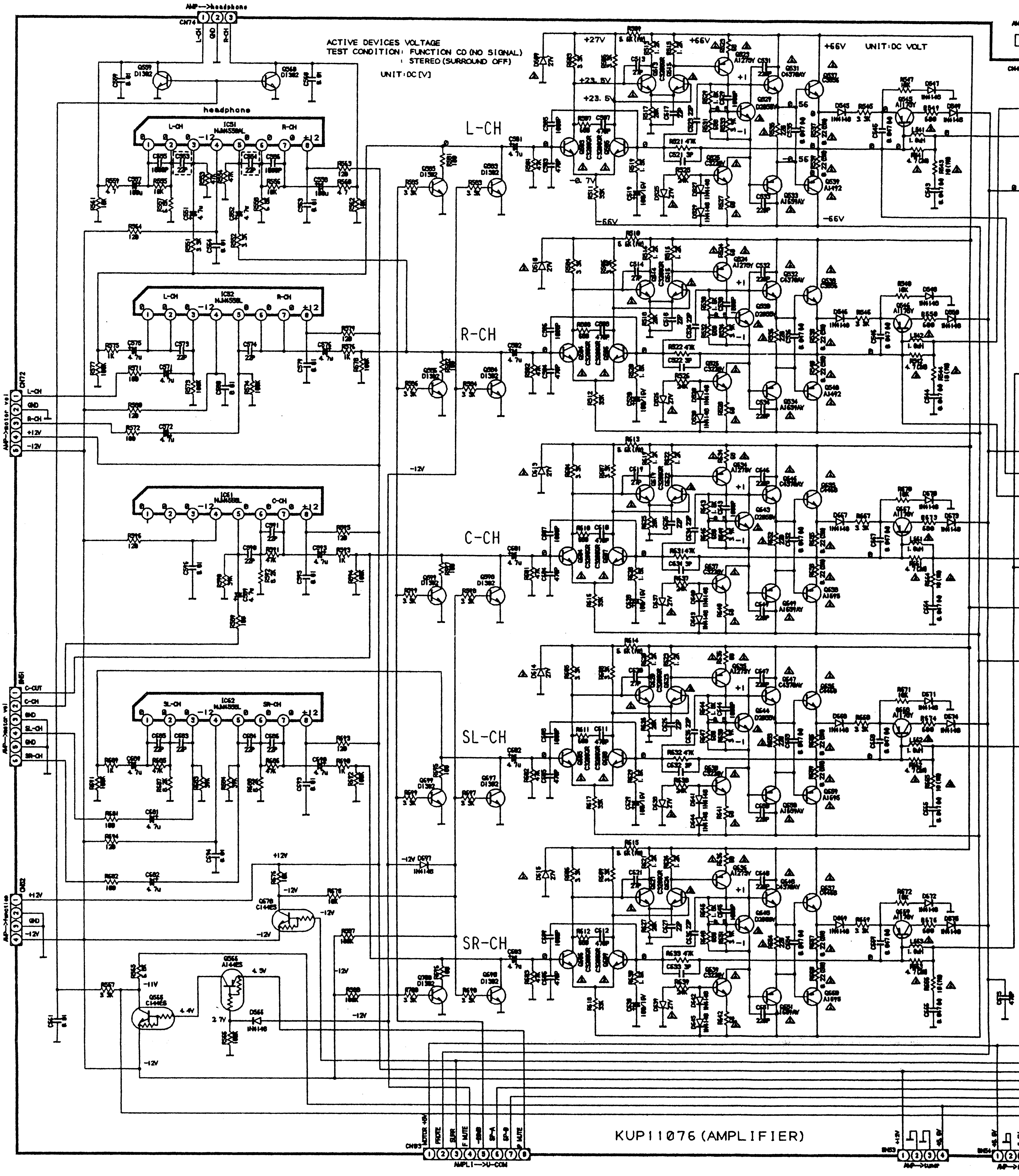
* THE CAPACITANCE IS MICROFARAD P=PICO FARAD

* THIS SCHEMATIC DIAGRAM MAY BE MODIFYED AT ANY TIME WITH THE IMPROVEMENT OF PERFORMANCE.

* ALL VOLTAGE ARE MEASURED WITH GROUND.
DC:VALUES WITH NO SINGAL AC:RMS


KUP11076 (AMPLIFIER)
ACTIVE DEVICES VOLTAGE
TEST CONDITION: FUNCTION CD (NO SIGNAL)
: STEREO (SURROUND OFF)
UNIT:DC[V]
UNIT:DC VOLT
AMP—>headphone
CN74
L-CH
GND
R-CH
headphone
IC51 NJM4558L
IC52 NJM4558L
IC61 NJM4558L
IC62 NJM4558L
L-CH
R-CH
C-CH
SL-CH
SR-CH
CN72
AMP—>motor vol
CN61
C-OUT
GND
CN62
AMP—>motor
+12V
-12V
+27V
+66V
-66V
+23.5V
CN93
MOTOR +5V
PROTE
SURR
F MUTE
-5008
SP-A
SP-B
P MUTE
AMPLI—>U-COM
AMP—>tuner

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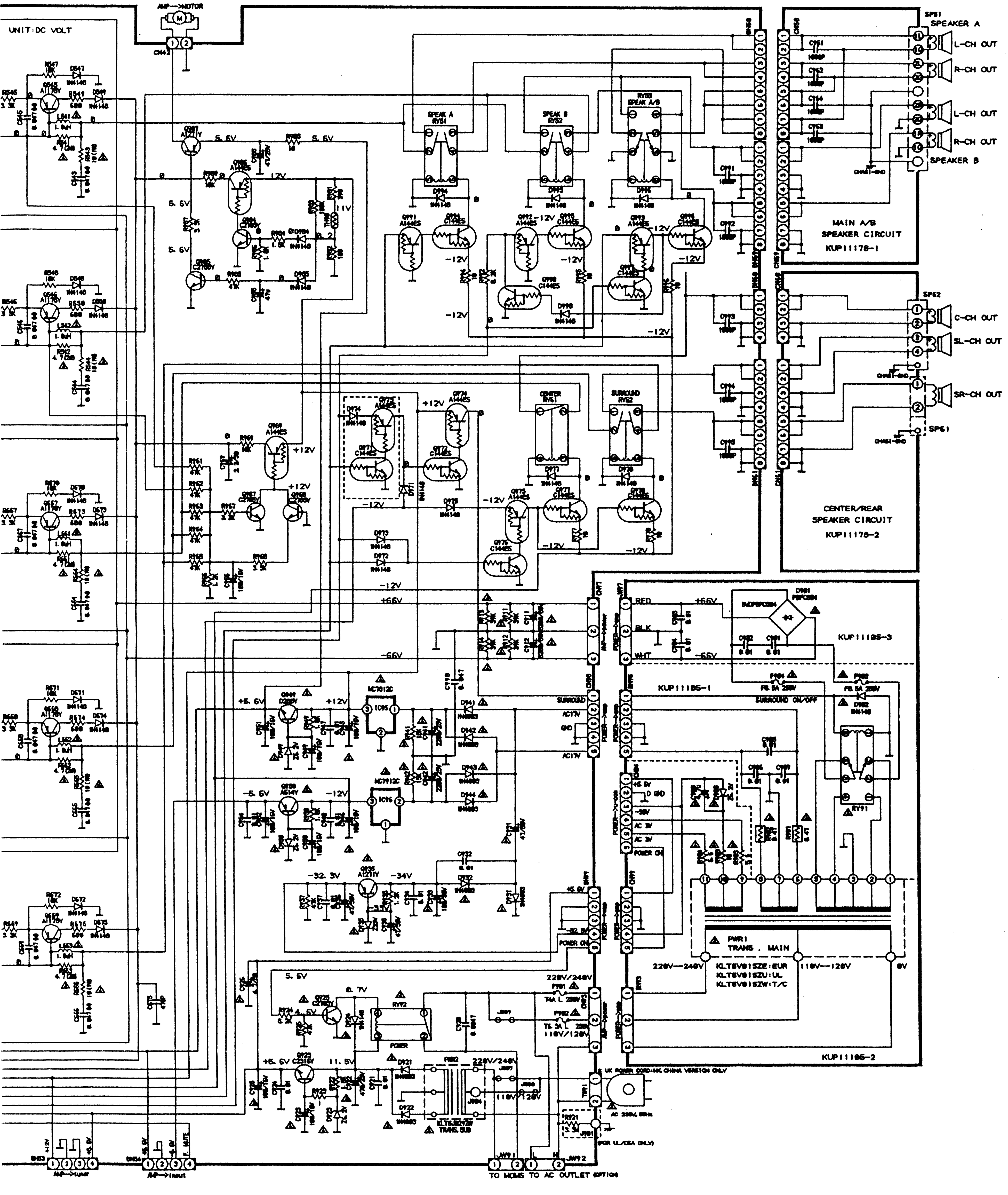
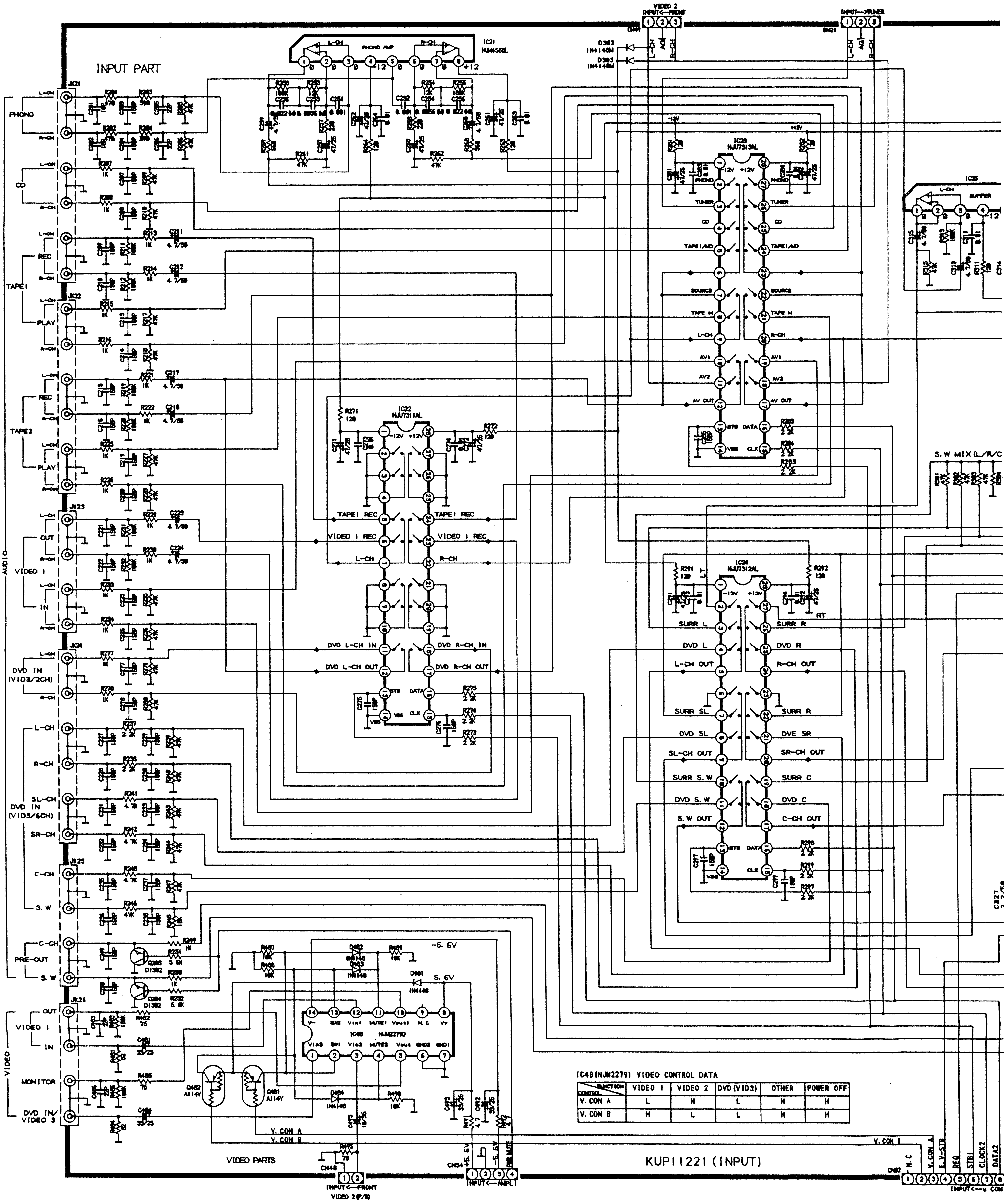
COMPONENTS IDENTIFIED BY ⚠ MARK HAVE SPECIAL CHARACTERISTICS.
IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS
USE ONLY MANUFACTURER'S SPECIFIED PARTS.

** THE UNIT OF RESISTANCE IS OHM
K=1000 OHM, M=1000 KOHM

** THE UNIT OF CAPACITANCE IS MICROFARAD (uF)
$pF=10^{-6}$ uF

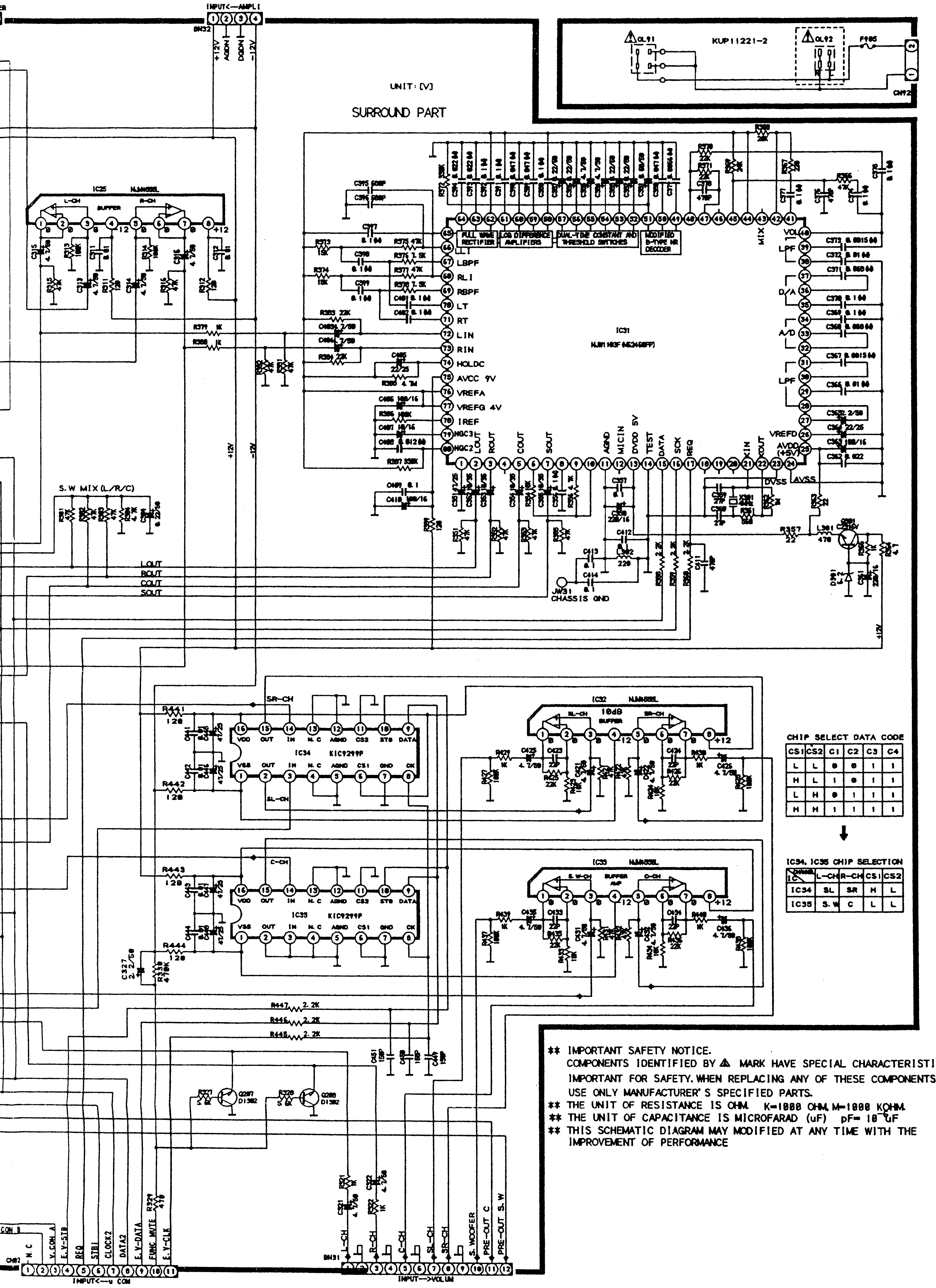
** THIS SCHEMATIC DIAGRAM MAY MODIFIED AT ANY TIME WITH THE IMPROVEMENT OF PERFORMANCE


UNIT:DC VOLT
AMP->MOTOR
CN42
SPEAK A
SPEAK B
SPEAK A/B
RY51
RY52
RY53
CENTER
RY61
SURROUND
RY62
SP51
SPEAKER A
L-CH OUT
R-CH OUT
L-CH OUT
R-CH OUT
SPEAKER B
CHAS1-GND
MAIN A/B
SPEAKER CIRCUIT
KUP11178-1
SP52
C-CH OUT
SL-CH OUT
SR-CH OUT
SP61
CENTER/REAR
SPEAKER CIRCUIT
KUP11178-2
CN58
CN59
CN61
RED
BLK
WHT
+66V
-66V
D901
PBPC804
KUP11185-3
KUP11185-1
F904
FB 5A 250V
F903
FB 5A 250V
SURROUND ON/OFF
D902
1N4148
RY91
+5.6V
D GND
-38V
AC 3V
AC 3V
POWER ON
PWR1
TRANS. MAIN
220V—240V
110V—120V
0V
KLT6V815ZE:EUR
KLT6V815ZU:UL
KLT6V815ZW:T/C
KUP11185-2
MC7812C
IC95
MC7912C
IC96
+5.6V
+12V
-5.6V
-12V
-32.3V
-34V
5.6V
11V
AMP->power
POWER->amp
POWER
RY92
T4A L 250V
T6.3A L 250V
110V/120V
220V/240V
11.5V
KLT5J82V2W
TRANS. SUB
* UK POWER CORD:HK CHINA VERSION ONLY
AC 230V, 50Hz
(FOR UL/CSA ONLY)
TO MCMS
TO AC OUTLET (OPTION)
JW91
JW92
BN53
AMP->tuner
BN54
AMP->input
+12V
+5.6V
F.MUTE


INPUT PART
PHONO
CD
TAPE1
REC
PLAY
TAPE2
VIDEO 1
OUT
IN
DVD IN (VID3/2CH)
DVD IN (VID3/6CH)
L-CH
R-CH
SL-CH
SR-CH
C-CH
S.W
PRE-OUT
AUDIO
VIDEO
MONITOR
DVD IN/ VIDEO 3
IC21 NJM4558L
PHONO AMP
IC22 NJU7311AL
TAPE1 REC
VIDEO 1 REC
DVD L-CH IN
DVD R-CH IN
DVD L-CH OUT
DVD R-CH OUT
IC23 NJU7313AL
PHONO
TUNER
CD
TAPE1/MD
SOURCE
TAPE M
AV1
AV2
AV OUT
STB
DATA
CLK
IC24 NJU7312AL
SURR L
SURR R
DVD L
DVD R
L-CH OUT
R-CH OUT
SURR SL
DVD SL
DVE SR
SL-CH OUT
SR-CH OUT
SURR S.W
SURR C
DVD S.W
DVD C
S.W OUT
C-CH OUT
IC25
BUFFER
S.W MIX (L/R/C
IC48 NJM2279D
VIDEO PARTS
VIDEO 2
INPUT←FRONT
INPUT→TUNER
INPUT←AMPLI
INPUT←u COM
V.CON A
V.CON B
-5.6V
5.6V
+12
-12V
+12V
KUP11221 (INPUT)

IC48(NJM2279) VIDEO CONTROL DATA

FUNCTION / CONTROL	VIDEO 1	VIDEO 2	DVD(VID3)	OTHER	POWER OFF
V.CON A	L	H	L	H	H
V.CON B	H	L	L	H	H


INPUT<--AMPLI
CN32
+12V
AGDN
DGDN
-12V
UNIT: [V]
SURROUND PART
KUP11221-2
OL91
OL92
F905
CN92
IC25 NJM4558L
L-CH
BUFFER
R-CH
IC31
FULL WAVE RECTIFIER
LOG DIFFERENCE AMPLIFIERS
DUAL-TIME CONSTANT AND THRESHOLD SWITCHES
MODIFIED B-TYPE NR DECODER
LBPF
RLI
RBPF
LT
RT
LIN
RIN
HOLDC
AVCC 9V
VREFA
VREFG 4V
IREF
NGC3
NGC2
LOUT
ROUT
COUT
SOUT
AGND
MICIN
DVDD 5V
TEST
DATA
SCK
REQ
XIN
XOUT
VREFD
AVDD (+5V)
DVSS
AVSS
VOL
LPF
D/A
A/D
MIX
JW31 CHASSIS GND
S.W MIX (L/R/C)
LOUT
ROUT
COUT
SOUT
+12V
-12V
SR-CH
SL-CH
C-CH
IC34 KIC9299P
IC35 KIC9299P
VDD
OUT
IN
N.C
AGND
CS2
STB
DATA
VSS
CS1
GND
CK
IC32 NJM4558L
SL-CH
10dB BUFFER
SR-CH
IC33 NJM4558L
S.W-CH
BUFFER AMP
C-CH
R441 120
R442 120
R443 120
R444 120
R447 2.2K
R446 2.2K
R445 2.2K
Q207 D1302
Q208 D1302
CN81
N.C
V.CON_A
E.V-STB
REQ
STB1
CLOCK2
DATA2
E.V-DATA
FUNC MUTE
E.V-CLK
INPUT<--u COM
CN31
L-CH
R-CH
C-CH
SL-CH
SR-CH
S.WOOFER
PRE-OUT C
PRE-OUT S.W
INPUT-->VOLUM

CHIP SELECT DATA CODE

CS1	CS2	C1	C2	C3	C4
L	L	0	0	1	1
H	L	1	0	1	1
L	H	0	1	1	1
H	H	1	1	1	1

↓

IC34, IC35 CHIP SELECTION

CHANNEL IC	L-CH	R-CH	CS1	CS2
IC34	SL	SR	H	L
IC35	S.W	C	L	L

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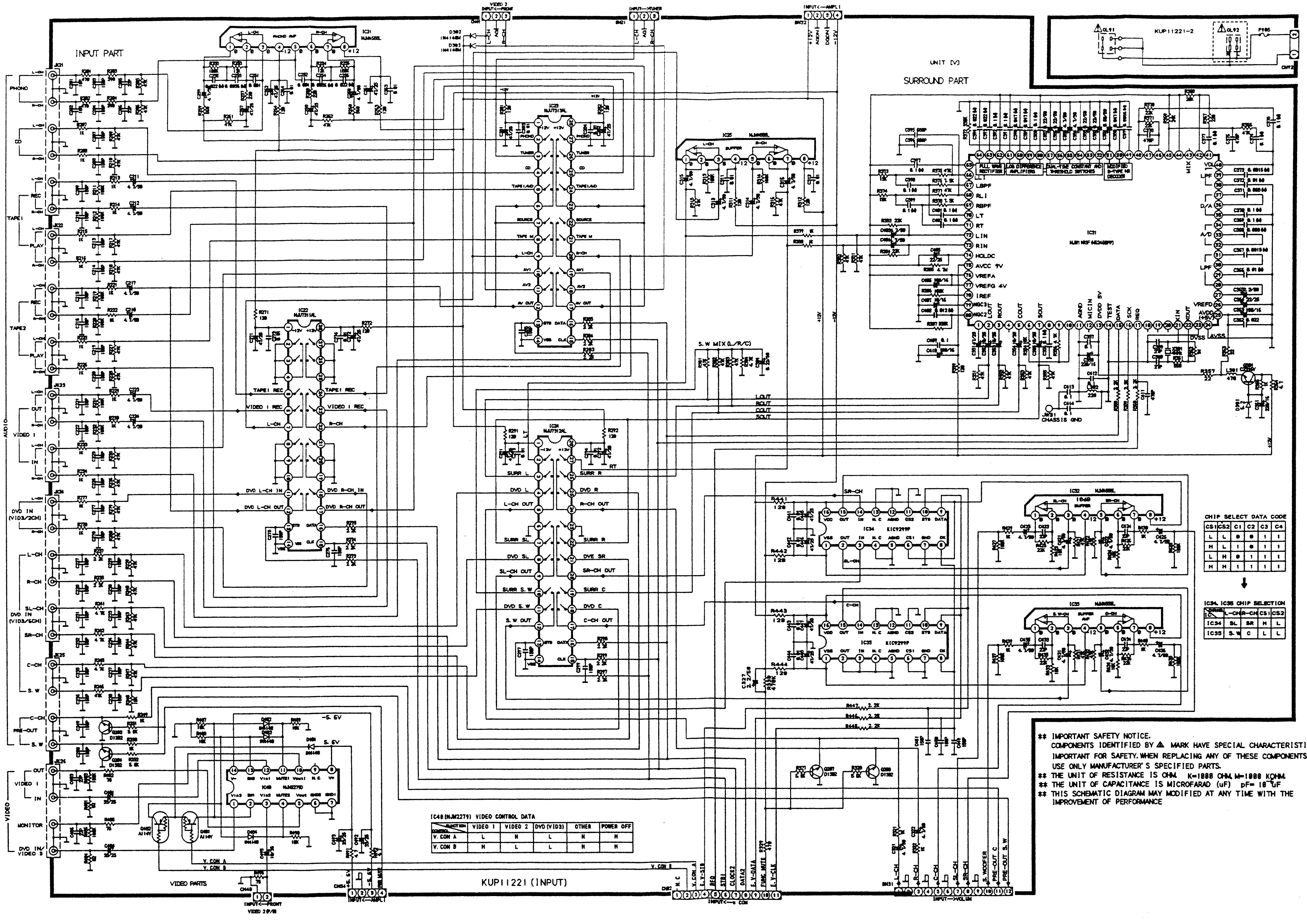
** THE UNIT OF CAPACITANCE IS MICROFARAD (uF) pF= 10^{-6} uF

** THIS SCHEMATIC DIAGRAM MAY MODIFIED AT ANY TIME WITH THE IMPROVEMENT OF PERFORMANCE


INPUT PART
UNIT [V]
SURROUND PART
KUP11221-2
VIDEO PARTS
KUP11221 (INPUT)
IC21 NJM4558L
IC22 NJU7313AL
IC23 NJU7313AL
IC24 NJU7312AL
IC25 NJM4558L
IC31 NJU1 NS3F (KS3408FP)
IC32 NJM4558L
IC33 NJM4558L
IC34 KIC9299P
IC35 KIC9299P
IC48 NJM2279D
PHONO
CD
TAPE1
TAPE2
VIDEO 1
DVD IN (VID3/2CH)
DVD IN (VID3/6CH)
PRE-OUT
MONITOR
DVD IN/ VIDEO 3
AUDIO
VIDEO
S.W MIX (L/R/C)
CHASSIS GND
INPUT<-FRONT
INPUT->TUNER
INPUT<--AMPL1
INPUT<--ANPL1
INPUT<--u COM
INPUT-->VOLUM
VIDEO 2
VIDEO 2P/M

CHIP SELECT DATA CODE

CS1	CS2	C1	C2	C3	C4
L	L	0	0	1	1
H	L	1	0	1	1
L	H	0	1	1	1
H	H	1	1	1	1

IC34, IC35 CHIP SELECTION

IC	L-CH	R-CH	CS1	CS2
IC34	SL	SR	H	L
IC35	S.W	C	L	L

IC48 (NJM2279) VIDEO CONTROL DATA

FUNCTION / CONTROL	VIDEO 1	VIDEO 2	DVD (VID3)	OTHER	POWER OFF
V. CON A	L	H	L	H	H
V. CON B	H	L	L	H	H

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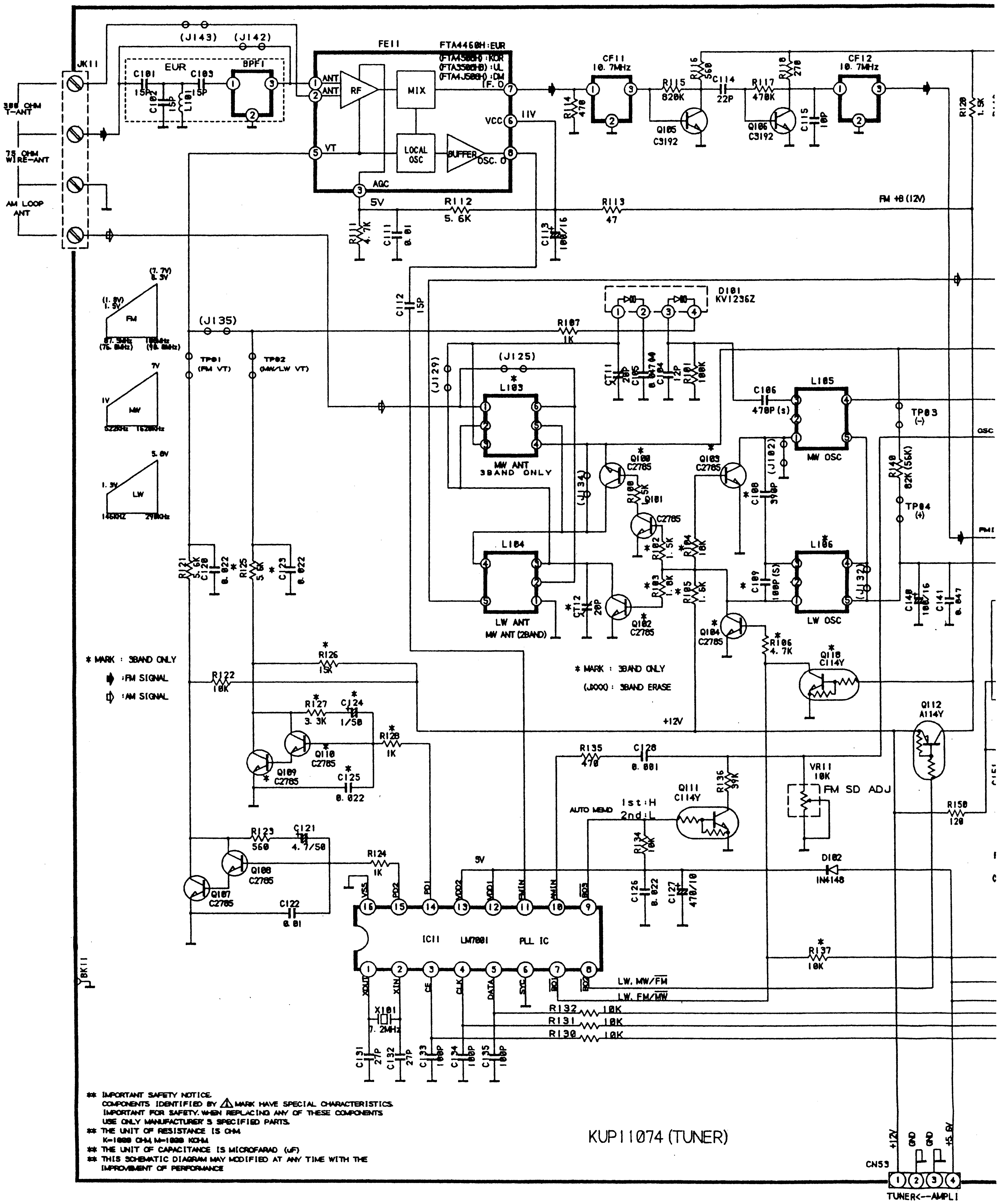
** THE UNIT OF CAPACITANCE IS MICROFARAD (uF) pF= 10^{-6} uF
** THIS SCHEMATIC DIAGRAM MAY MODIFIED AT ANY TIME WITH THE IMPROVEMENT OF PERFORMANCE


JK11
300 OHM T-ANT
75 OHM WIRE-ANT
AM LOOP ANT
(J143)
(J142)
EUR
C101
15P
C102
15P
L101
C103
15P
BPF1
FE11
FTA4460H:EUR
(FTA4500H):KOR
(FTA3500HB):UL
(FTA4J500H):DM
ANT
RF
MIX
IF. O
VCC
11V
VT
LOCAL OSC
BUFFER
OSC. O
AGC
5V
R112
5.6K
R111
4.7K
C111
0.01
C113
100/16
R113
47
FM +B (12V)
CF11
10.7MHz
R114
470
R115
820K
R116
560
C114
22P
Q105
C3192
R117
470K
R118
270
Q106
C3192
C115
10P
CF12
10.7MHz
R120
1.5K
(7.7V)
8.5V
(1.8V)
1.5V
FM
87.5MHz
(76.0MHz)
108MHz
(90.0MHz)
7V
1V
MW
522KHz
1620KHz
5.0V
1.3V
LW
146KHZ
290KHz
(J135)
TP01
(FM VT)
TP02
(MW/LW VT)
C112
15P
D101
KV1236Z
R107
1K
(J129)
(J125)
L103
MW ANT
3BAND ONLY
CT11
20P
C105
0.0047
C104
12P
R101
100K
C106
470P(s)
L105
MW OSC
TP03
(-)
OSC
Q100
C2765
Q103
C2765
(J102)
C108
390P
(J134)
R100
15K
Q101
C2765
R102
1.5K
R104
10K
R140
82K(56K)
TP04
(+)
FM
L104
L106
LW ANT
MW ANT (2BAND)
CT12
20P
R103
1.6K
R105
1.6K
C109
100P(S)
(J132)
LW OSC
C140
100/16
C141
0.047
Q102
C2765
Q104
C2765
R106
4.7K
Q110
C114Y
R121
5.6K
C120
0.022
R125
5.6K
C123
0.022
* MARK : 3BAND ONLY
:FM SIGNAL
:AM SIGNAL
R126
15K
R122
10K
* MARK : 3BAND ONLY
(JXXX) : 3BAND ERASE
+12V
Q112
A114Y
R127
3.3K
C124
1/50
Q110
C2765
R128
1K
Q109
C2765
C125
0.022
R135
470
C128
0.001
R136
39K
VR11
10K
FM SD ADJ
Q111
C114Y
AUTO MEMO
1st:H
2nd:L
R134
10K
R150
120
R123
560
C121
4.7/50
Q108
C2765
R124
1K
5V
D102
1N4148
Q107
C2765
C122
0.01
VSS
PD2
PD1
VDD2
VDD1
FMIN
AMIN
BO3
C126
0.022
C127
470/10
IC11
LM7001
PLL IC
XOUT
XIN
CE
CLK
DATA
SYC
BO1
BO2
R137
10K
LW, MW/FM
LW, FM/MW
BK11
X101
7.2MHz
R132 10K
R131 10K
R130 10K
C131
27P
C132
27P
C133
100P
C134
100P
C135
100P
+12V
GND
GND
+5.6V
CN53
TUNER<--AMPL1

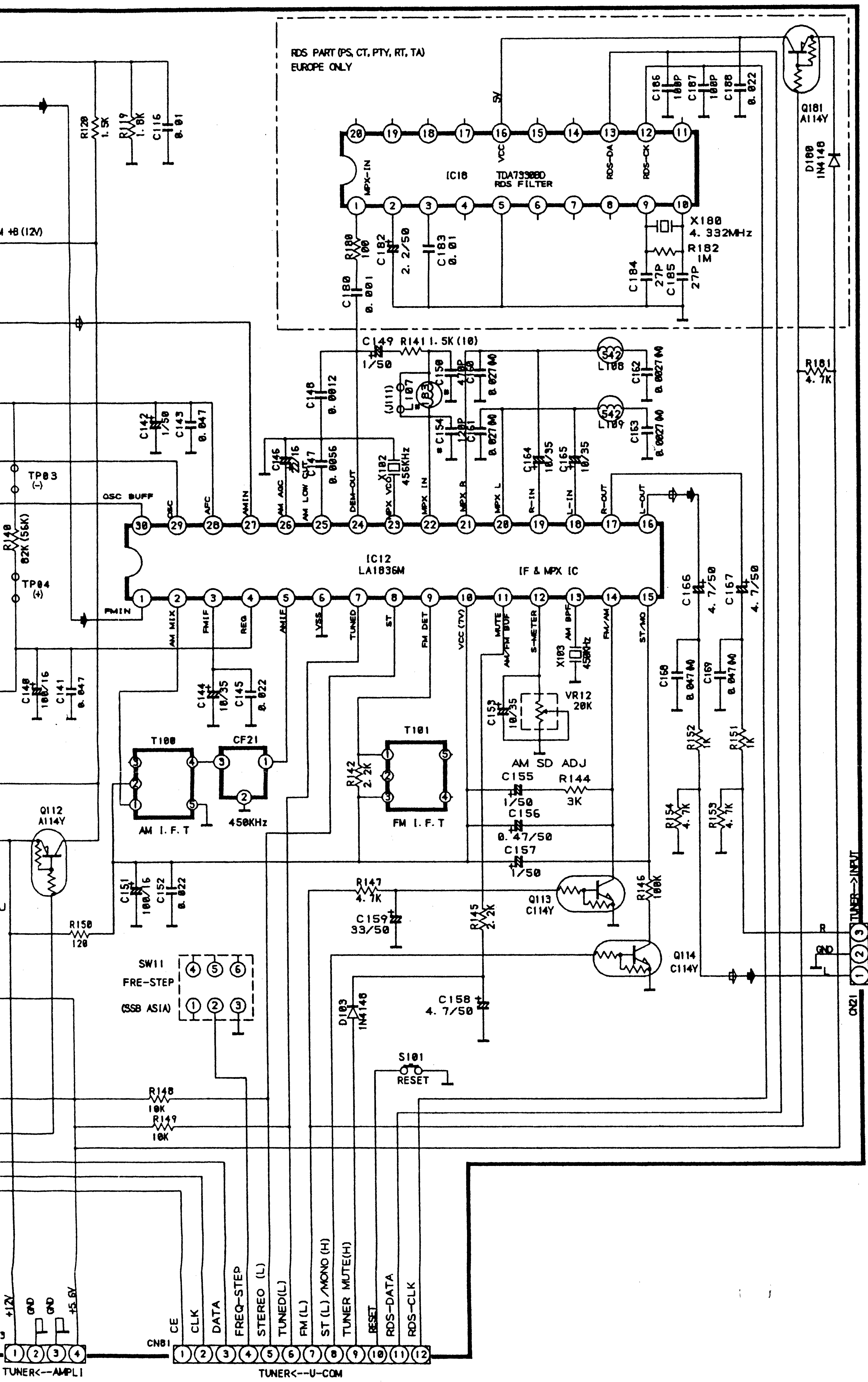
** IMPORTANT SAFETY NOTICE.
COMPONENTS IDENTIFIED BY ⚠ MARK HAVE SPECIAL CHARACTERISTICS.
IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS
USE ONLY MANUFACTURER'S SPECIFIED PARTS.

** THE UNIT OF RESISTANCE IS OHM
K=1000 OHM, M=1000 KOHM

** THE UNIT OF CAPACITANCE IS MICROFARAD (uF)

** THIS SCHEMATIC DIAGRAM MAY MODIFIED AT ANY TIME WITH THE
IMPROVEMENT OF PERFORMANCE

KUP11074 (TUNER)


RDS PART (PS, CT, PTY, RT, TA)
EUROPE ONLY
IC18 TDA7330BD RDS FILTER
MPX-IN
VCC
RDS-DA
RDS-CK
5V
X180 4.332MHz
R182 1M
C184 27P
C185 27P
C186 100P
C187 100P
C188 0.022
C180 0.001
R180 100
C182 2.2/50
C183 0.01
Q181 A114Y
D180 1N4148
R181 4.7K
R120 1.5K
R119 1.8K
C116 0.01
+B (12V)
C149 1/50
R141 1.5K (10)
C148 0.0012
C150 470P
C160 0.027(M)
C154 120P
C161 0.027(M)
L107
(J11)
L108
L109
C162 0.0027(M)
C163 0.0027(M)
C142 1/50
C143 0.047
C146 22/16
C147 0.0056
X182 456KHz
C164 10/35
C165 10/35
TP03 (-)
TP04 (+)
R140 82K (56K)
OSC BUFF
OSC
APC
AMIN
AM ADC
AM LOW CUT
DEM-OUT
MPX VCO
MPX IN
MPX R
MPX L
R-IN
L-IN
R-OUT
L-OUT
IC12 LA1836M
IF & MPX IC
FMIN
AM MIX
FMIF
REG
AMIF
VSS
TUNED
ST
FM DET
VCC (TV)
AM/FM BUF
MUTE
S-METER
AM BPF
FM/AM
ST/MO
C166 4.7/50
C167 4.7/50
C168 0.047(M)
C169 0.047(M)
R152 1K
R151 1K
R154 4.7K
R153 4.7K
C140 100/16
C141 0.047
C144 10/35
C145 0.022
X103 450KHz
C153 10/35
VR12 20K
AM SD ADJ
C155 1/50
R144 3K
C156 0.47/50
C157 1/50
T100
AM I.F.T
CF21
450KHz
T101
FM I.F.T
R142 2.2K
Q112 A114Y
C151 100/16
C152 0.022
R150 120
R147 4.7K
C159 33/50
R145 2.2K
Q113 C114Y
R146 100K
Q114 C114Y
SW11 FRE-STEP
(SSB ASIA)
D103 1N4148
C158 4.7/50
S101 RESET
R148 10K
R149 10K
TUNER-->INPUT
R
GND
L
CN21
+12V
GND
GND
+5.6V
TUNER<--AMPLI
CN01
CE
CLK
DATA
FREQ-STEP
STEREO (L)
TUNED(L)
FM (L)
ST (L) /MONO (H)
TUNER MUTE(H)
RESET
RDS-DATA
RDS-CLK
TUNER<--U-COM

FM ONLY
UNIT: [V]

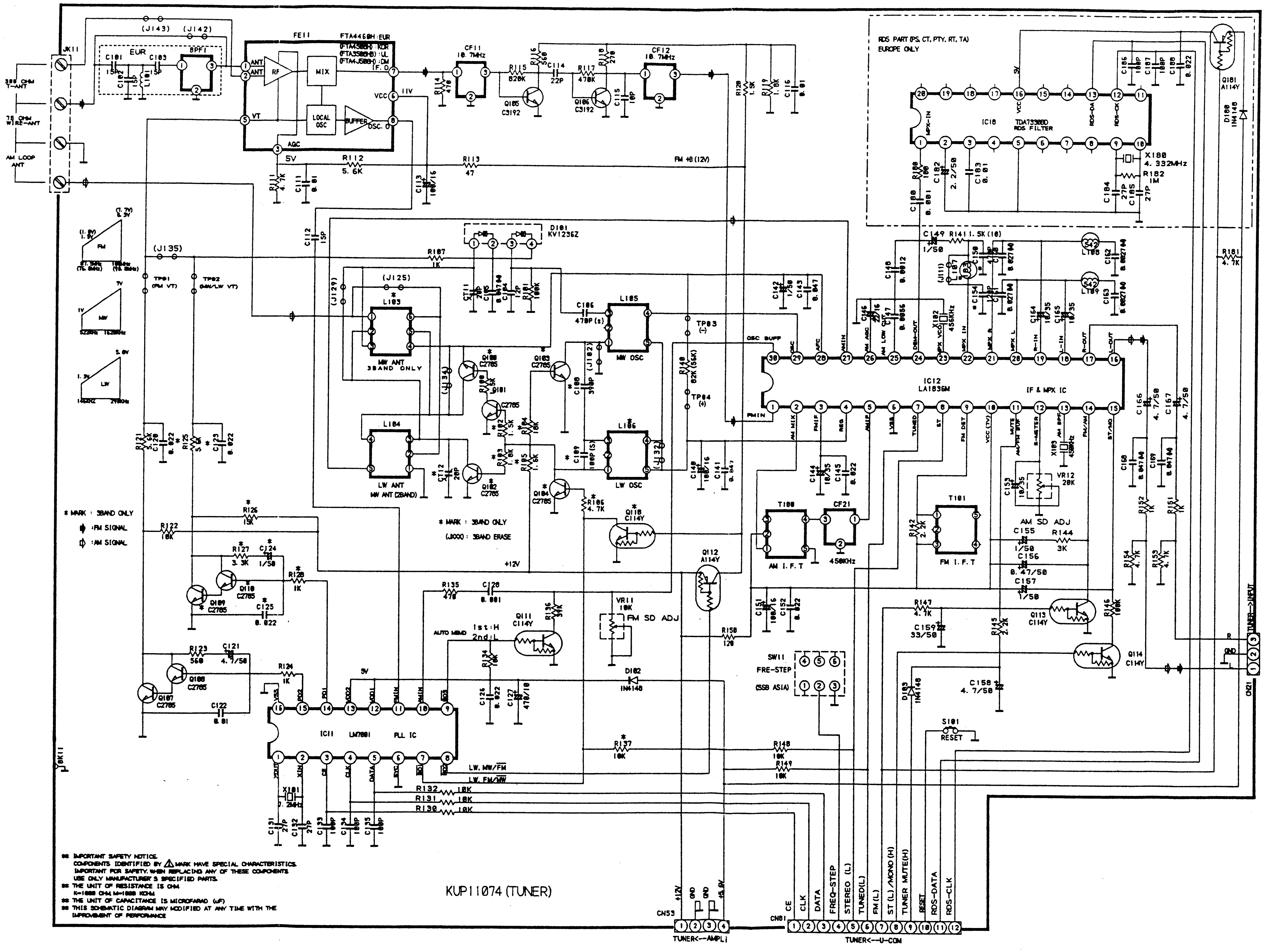
TDA7330D (IC18)	
1pin	2.4
2	2.4
3	1.7
4	1.7
5	0
6	2.9
7	2.6
8	2.7
9	2.6
10	2.6
11	0
12	0
13	0
14	0
15	5
16	5
17	0
18	2.3
19	2.6
20	2.7

UNIT: [V]

LA1836M (IC12)			
pin band	FM	MW	LW
1	3.6	3.6	3.6
2	7.3	8	8
3	3.6	3.6	3.6
4	3.6	3.6	3.6
5	3.6	3.6	3.6
6	0	0	0
7	0	0	0
8	0	5.2	5.2
9	7.3	8	8
10	7.3	8	8
11	0	0	0
12	4.3	4.2	4.2
13	1.7	1.6	1.6
14	5.7	0	0
15	6.2	6.7	6.6
16	3.6	3.6	3.6
17	3.6	3.6	3.6
18	3.6	3.6	3.6
19	3.6	3.6	3.6
20	3.5	3.5	3.5
21	3.5	3.5	3.5
22	2.8	2.8	2.8
23	4.5	1.4	1.2
24	2.5	3.5	4.0
25	2.8	3.4	3.9
26	0	1.3	1.3
27	3.5	3.2	3.2
28	3.5	3.2	3.6
29	3.6	3.6	3.6
30	1.6	1.3	1.3

UNIT: [V]

LM7001 (IC11)			
pin band	FM	MW	LW
1	1.3	1.6	1.3
2	1.6	1.6	1.6
3	0	0	0
4	0	0	0
5	5.2	0	0
6	0	0	0
7	1.8	0	2.2
8	0	12	12
9	0	0	0
10	0	1.8	1.8
11	2.8	0	0
12	4.7	4.7	4.7
13	4.7	4.7	4.7
14	1.1	1.0	1.1
15	1	1.1	1.1
16	0	0	0


JK11
300 OHM T-ANT
75 OHM WIRE-ANT
AM LOOP ANT
(J143)
(J142)
EUR
BPF1
FE11
FTA4450H: EUR
(FTA4500H): KOR
(FTA3500H): UL
(FTA4J500H): DM
ANT
RF
MIX
LOCAL OSC
BUFFER
OSC. O
IF. O
VCC
AGC
VT
5V
11V
CF11 10.7MHz
CF12 10.7MHz
Q105 C3192
Q106 C3192
R112 5.6K
R113 47
FM +B (12V)
RDS PART (PS, CT, PTY, RT, TA)
EUROPE ONLY
IC18 TDA7330D RDS FILTER
X180 4.332MHz
Q181 A114Y
D180 1N4148
D101 KV1236Z
(J135)
TP01 (FM VT)
TP02 (MW/LW VT)
L103
MW ANT 3BAND ONLY
L104
LW ANT MW ANT (2BAND)
L105
MW OSC
L106
LW OSC
TP03
TP04
Q100 C2785
Q101 C2785
Q102 C2785
Q103 C2785
Q104 C2785
Q110 C114Y
* MARK : 3BAND ONLY
(J000 : 3BAND ERASE
+12V
IC12 LA1836M
IF & MPX IC
OSC BUFF
X102 456KHz
X103 450KHz
T100
AM I.F.T
CF21 450KHz
T101
FM I.F.T
AM SD ADJ
VR12 20K
VR11 10K
FM SD ADJ
Q112 A114Y
Q113 C114Y
Q114 C114Y
Q111 C114Y
AUTO MEMO
1st: H
2nd: L
D102 1N4148
D103 1N4148
SW11 FRE-STEP (SSB ASIA)
S101 RESET
* MARK : 3BAND ONLY
: FM SIGNAL
: AM SIGNAL
Q107 C2785
Q108 C2785
Q109 C2785
Q110 C2785
IC11 LM7001 PLL IC
X101 7.2MHz
LW. MW/FM
LW. FM/MW
JBK11
CN21
TUNER--->INPUT
CN53
+12V
GND
GND
+5.6V
TUNER<--AMPLI
CN01
CE
CLK
DATA
FREQ-STEP
STEREO (L)
TUNED(L)
FM (L)
ST (L) /MONO (H)
TUNER MUTE(H)
RESET
RDS-DATA
RDS-CLK
TUNER<--U-COM

KUP11074 (TUNER)

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K=1000 OHM M=1000 KOHM
** THE UNIT OF CAPACITANCE IS MICROFARAD (uF)
** THIS SCHEMATIC DIAGRAM MAY MODIFIED AT ANY TIME WITH THE
IMPROVMENT OF PERFORMANCE

FM ONLY
UNIT: [V]

TDA7330D (IC18)	
1pin	2.4
2	2.4
3	1.7
4	1.7
5	0
6	2.9
7	2.6
8	2.7
9	2.6
10	2.6
11	0
12	0
13	0
14	0
15	5
16	5
17	0
18	2.3
19	2.6
20	2.7

UNIT: [V]

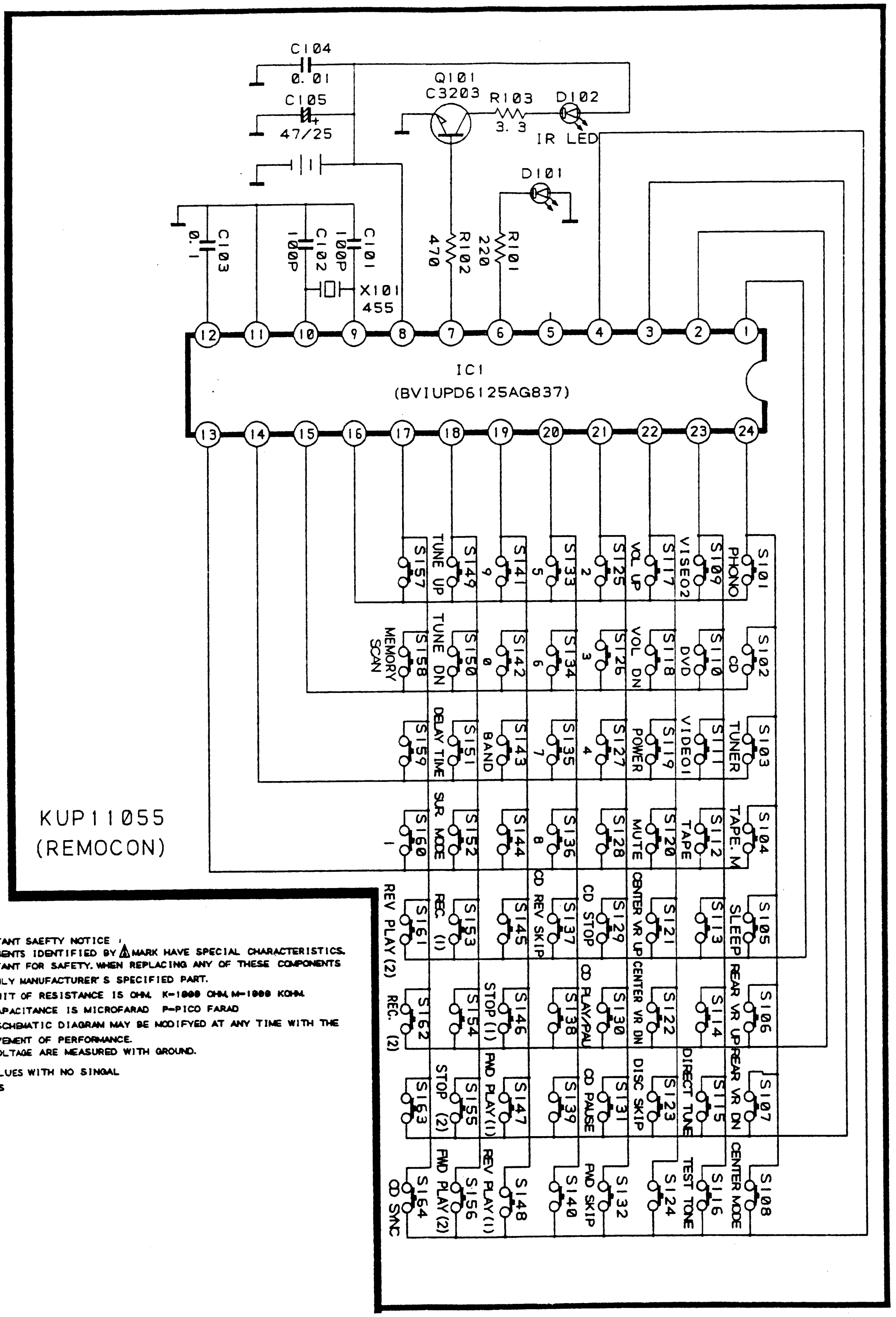
LA1836M (IC12)

pin \ band	FM	MW	LW
1	3.6	3.6	3.6
2	7.3	0	0
3	3.6	3.6	3.6
4	3.6	3.6	3.6
5	3.6	3.6	3.6
6	0	0	0
7	0	0	0
8	0	5.2	5.2
9	7.3	0	0
10	7.3	0	0
11	0	0	0
12	4.3	4.2	4.2
13	1.7	1.6	1.6
14	5.7	0	0
15	6.2	6.7	6.6
16	3.6	3.6	3.6
17	3.6	3.6	3.6
18	3.6	3.6	3.6
19	3.6	3.6	3.6
20	3.5	3.5	3.5
21	3.5	3.5	3.5
22	2.8	2.8	2.8
23	4.5	1.4	1.2
24	2.5	3.5	4.0
25	2.8	3.4	3.9
26	0	1.3	1.3
27	3.5	3.2	3.2
28	3.5	3.2	3.6
29	3.6	3.6	3.6
30	1.6	1.3	1.3

UNIT: [V]

LM7001 (IC11)

pin \ band	FM	MW	LW
1	1.3	1.6	1.3
2	1.6	1.6	1.6
3	0	0	0
4	0	0	0
5	5.2	0	0
6	0	0	0
7	1.8	0	2.2
8	0	12	12
9	0	0	0
10	0	1.8	1.8
11	2.8	0	0
12	4.7	4.7	4.7
13	4.7	4.7	4.7
14	1.1	1.0	1.1
15	1	1.1	1.1
16	0	0	0


C104
0.01
C105
47/25
Q101
C3203
R103
3.3
D102
IR LED
D101
C103
0.1
C102
100P
C101
100P
X101
455
R102
470
R101
220
IC1
(BV1UPD6125AG837)
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
S101 PHONO
S102 CD
S103 TUNER
S104 TAPE.M
S105 SLEEP
S106 REAR VR UP
S107 REAR VR DN
S108 CENTER MODE
S109 VISEO2
S110 DVD
S111 VIDEO1
S112 TAPE
S113
S114
S115 DIRECT TUNE
S116 TEST TONE
S117 VOL UP
S118 VOL DN
S119 POWER
S120 MUTE
S121 CENTER VR UP
S122 CENTER VR DN
S123 DISC SKIP
S124
S125 2
S126 3
S127 4
S128
S129 CD STOP
S130 CD PLAY/PAU
S131 CD PAUSE
S132 FWD SKIP
S133 5
S134 6
S135 7
S136 8
S137 CD REV SKIP
S138
S139
S140
S141 9
S142 0
S143 BAND
S144
S145
S146 STOP (1)
S147 FWD PLAY (1)
S148 REV PLAY (1)
S149 TUNE UP
S150 TUNE DN
S151 DELAY TIME
S152 SUR. MODE
S153 REC. (1)
S154
S155 STOP (2)
S156 FWD PLAY (2)
S157
S158 MEMORY SCAN
S159
S160 1
S161 REV PLAY (2)
S162 REC. (2)
S163
S164 CD SYNC
KUP11055
(REMOCON)

- IMPORTANT SAEFTY NOTICE :
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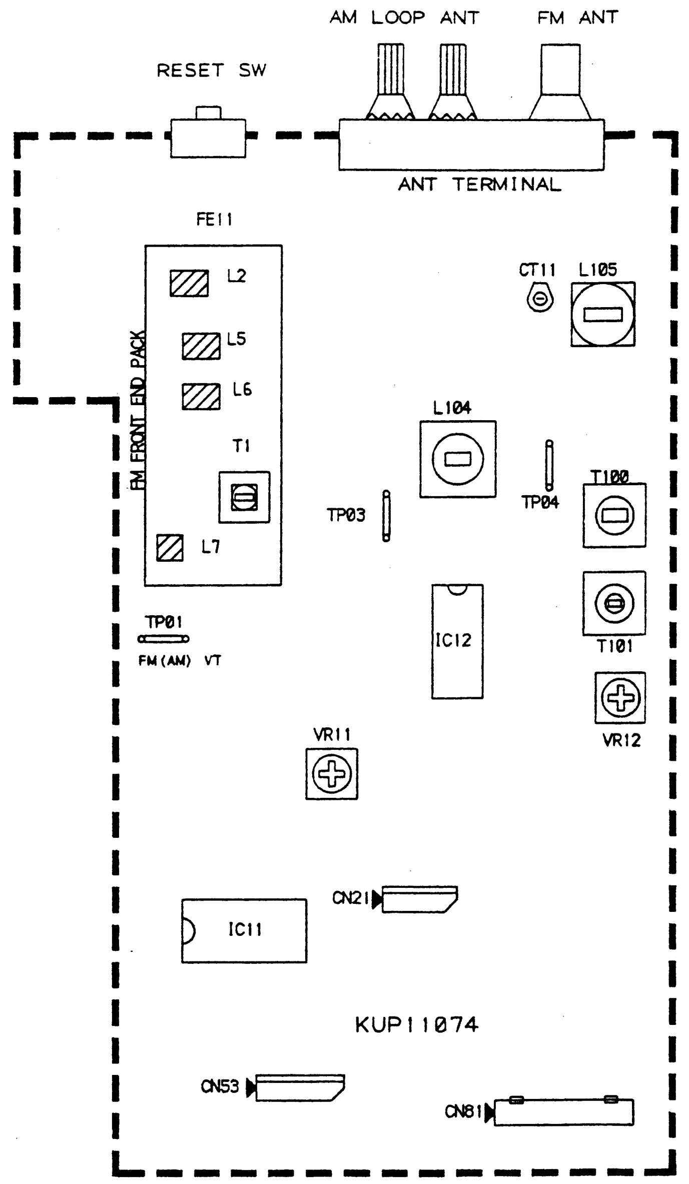
- THE UNIT OF RESISTANCE IS OHM. K=1000 OHM, M=1000 KOHM.
- THE CAPACITANCE IS MICROFARAD P=PICO FARAD
- THIS SCHEMATIC DIAGRAM MAY BE MODIFYED AT ANY TIME WITH THE IMPROVEMENT OF PERFORMANCE.
- ALL VOLTAGE ARE MEASURED WITH GROUND.

DC: VALUES WITH NO SINGAL
AC: RMS

TUNER ADJUSTMENT POINT

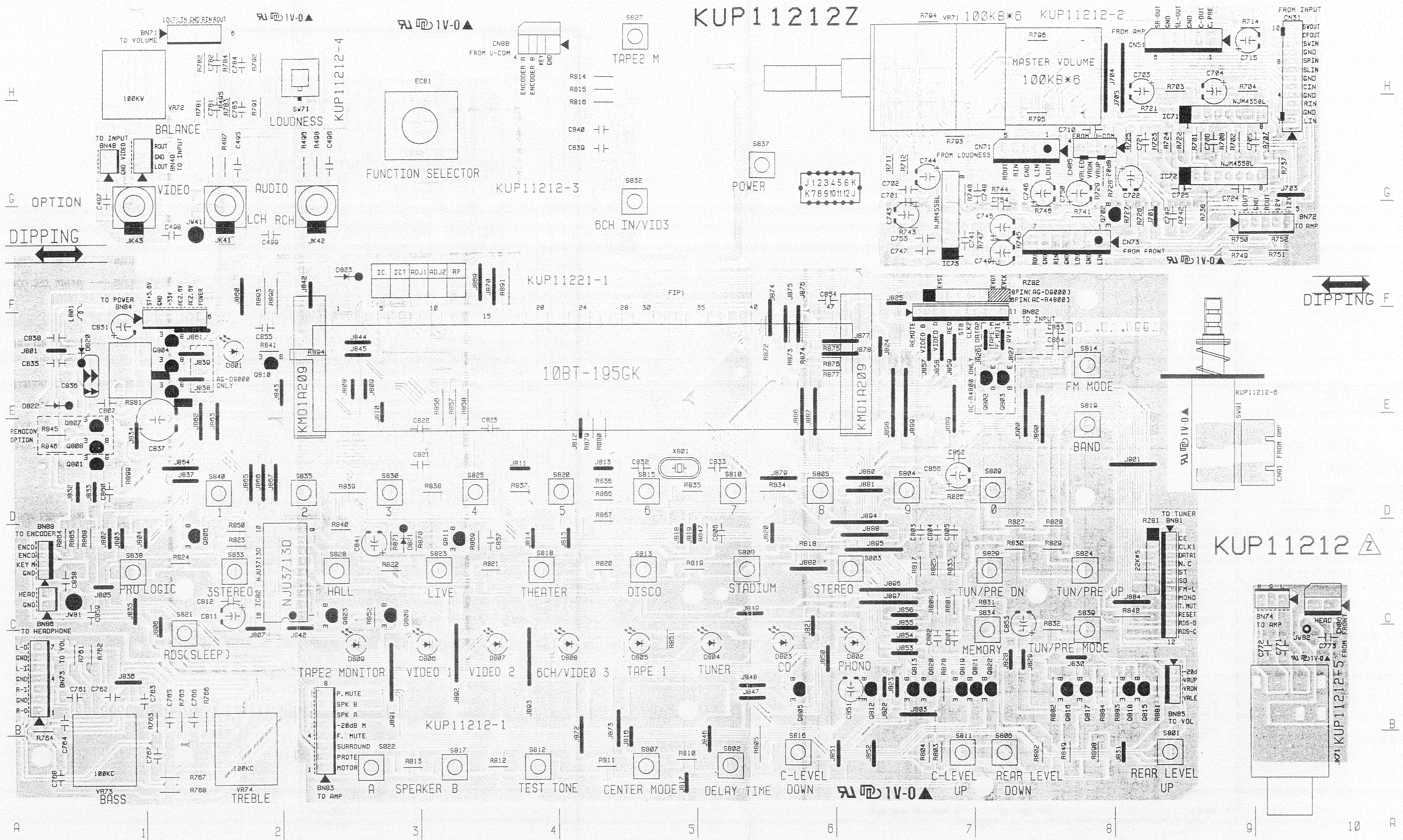

AM LOOP ANT
FM ANT
RESET SW
ANT TERMINAL
FE11
FM FRONT END PACK
L2
L5
L6
T1
L7
CT11
L105
L104
T100
TP03
TP04
TP01
FM (AM) VT
IC12
T101
VR11
VR12
CN21
IC11
KUP11074
CN53
CN81

L2, L5, L6 —— FM RF COIL (90.10MHz)
L7 —— FM OSC COIL
T1 —— FM IFT (MONO T.H.D)
L104 —— AM(MW) ANT COIL
L105 —— AM(MW) OSC COIL

CT11 —— AM(MW) ANT TRIMMER (1503KHz)
T100 —— AM(MW) IFT (612KHz)
T101 —— FM IFT (MONO T.H.D)
VR11 —— AM(MW) SD ADJUSTMENT
VR12 —— FM SD ADJUSTMENT
TP01 —— FM(AM) VT

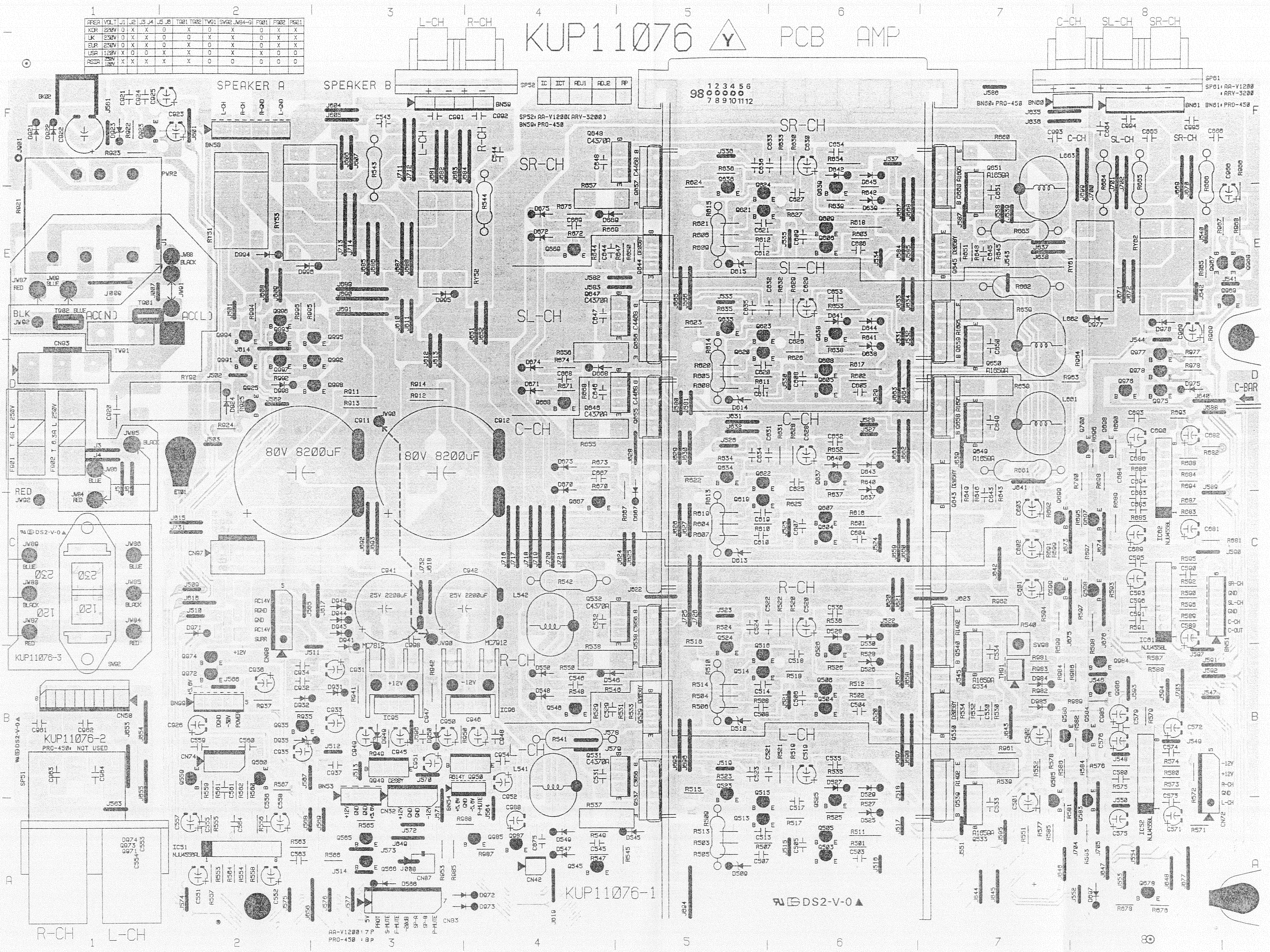
TP03, TP04 —— FM OFFSET ADJ TP

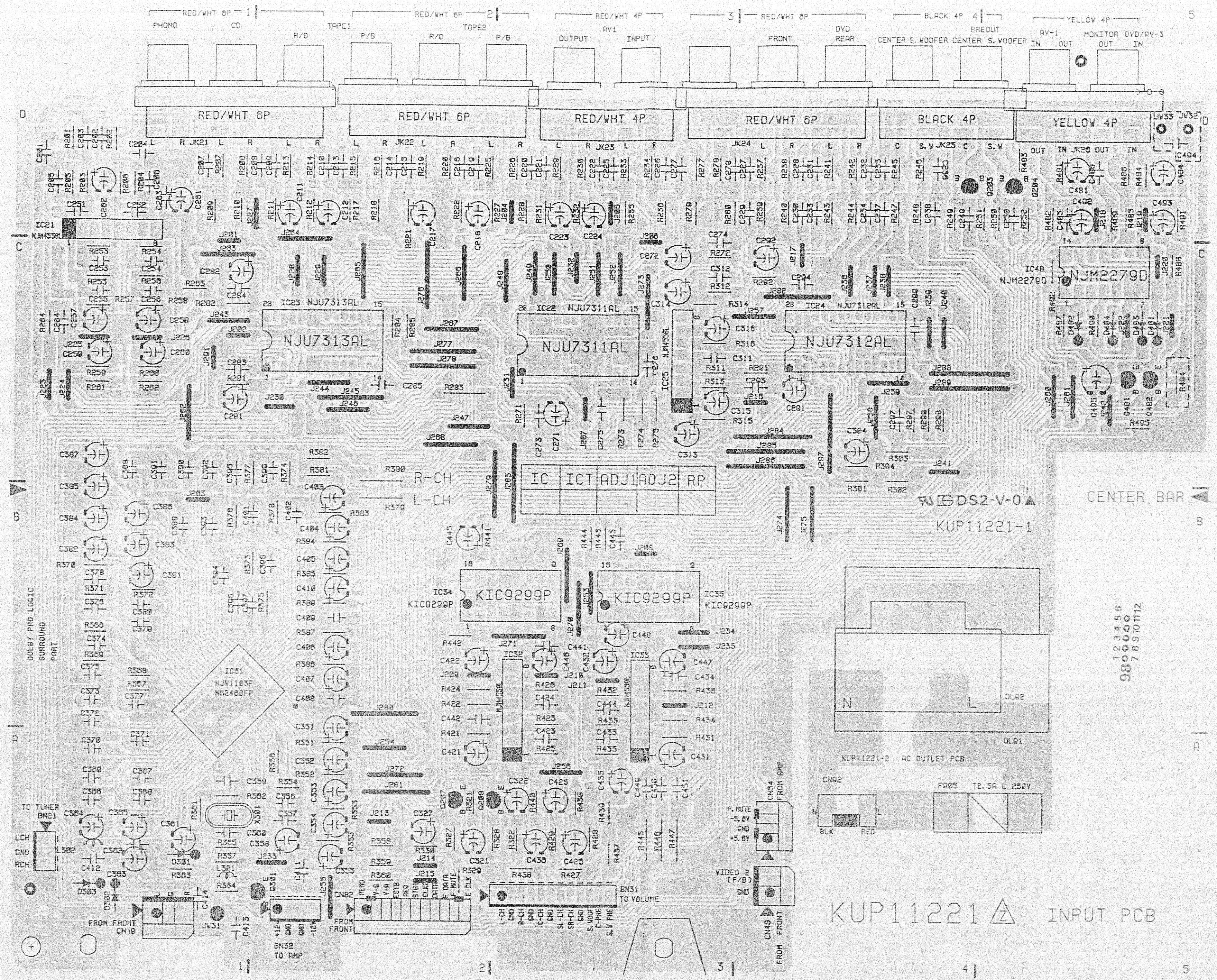
PRINTED CIRCUIT BOARDS

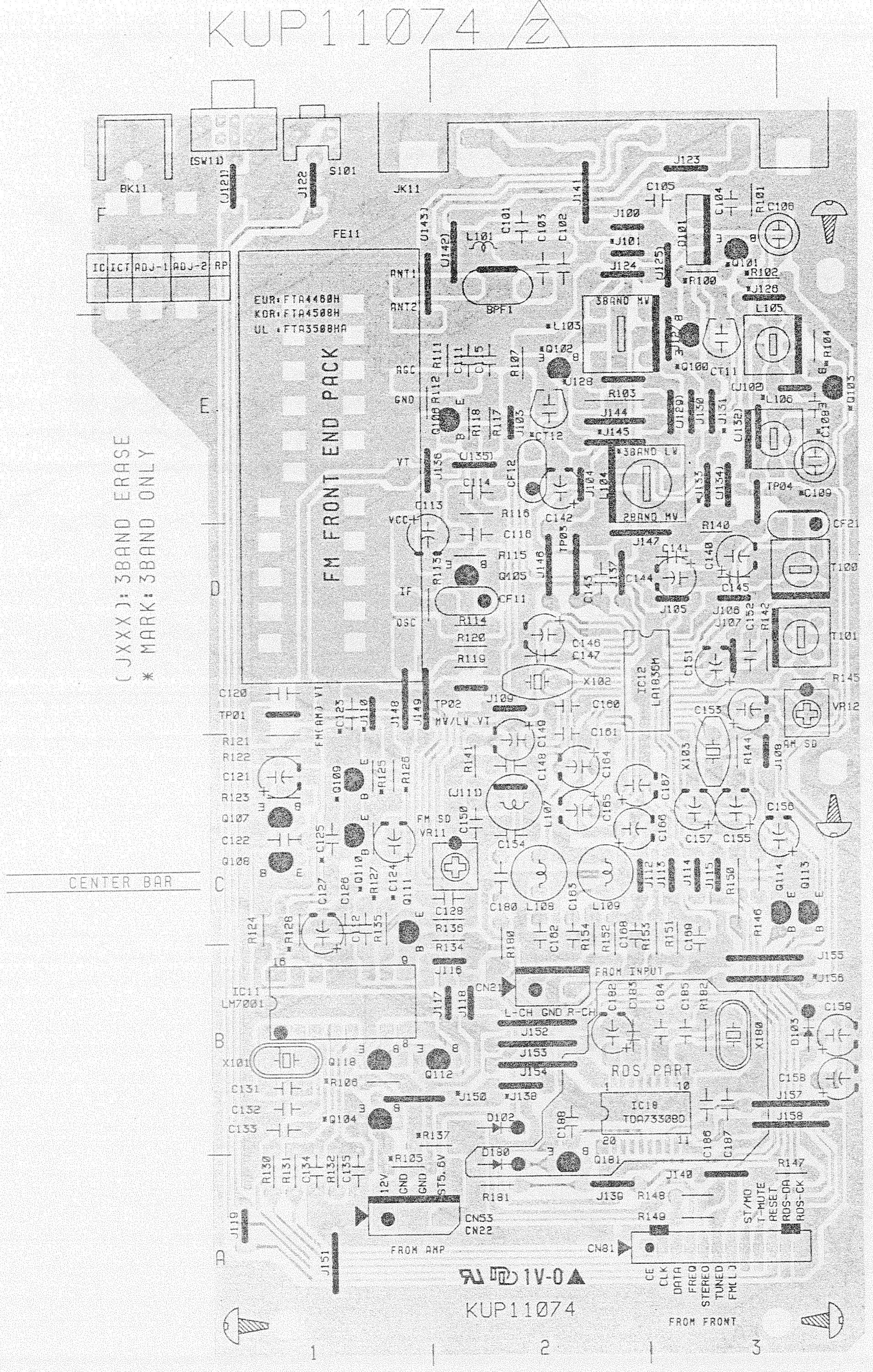

KUP11212Z
KUP11212-2
KUP11212-3
KUP11212-4
KUP11221-1
KUP11212-1
KUP11212-5
KUP11212
MASTER VOLUME 100KB*6
BALANCE
LOUDNESS
FUNCTION SELECTOR
TAPE2 M
POWER
6CH IN/VID3
OPTION
DIPPING
VIDEO
AUDIO
LCH RCH
10BT-195GK
KMD1A209
FM MODE
BAND
PRO LOGIC
3STEREO
HALL
LIVE
THEATER
DISCO
STADIUM
STEREO
TUN/PRE DN
TUN/PRE UP
MEMORY
TUN/PRE MODE
RDS(SLEEP)
TAPE2 MONITOR
VIDEO 1
VIDEO 2
6CH/VIDEO 3
TAPE 1
TUNER
CD
PHONO
A
SPEAKER B
TEST TONE
CENTER MODE
DELAY TIME
C-LEVEL DOWN
C-LEVEL UP
REAR LEVEL DOWN
REAR LEVEL UP
BASS
TREBLE
TO HEADPHONE
TO ENCODER
TO AMP
TO TUNER
TO INPUT
TO VOLUME
FROM FRONT
FROM AMP
FROM LOUDNESS
FROM U-COM
1V-0
A
1
2
3
4
5
6
7
8
9
10
A
B
C
D
E
F
G
H

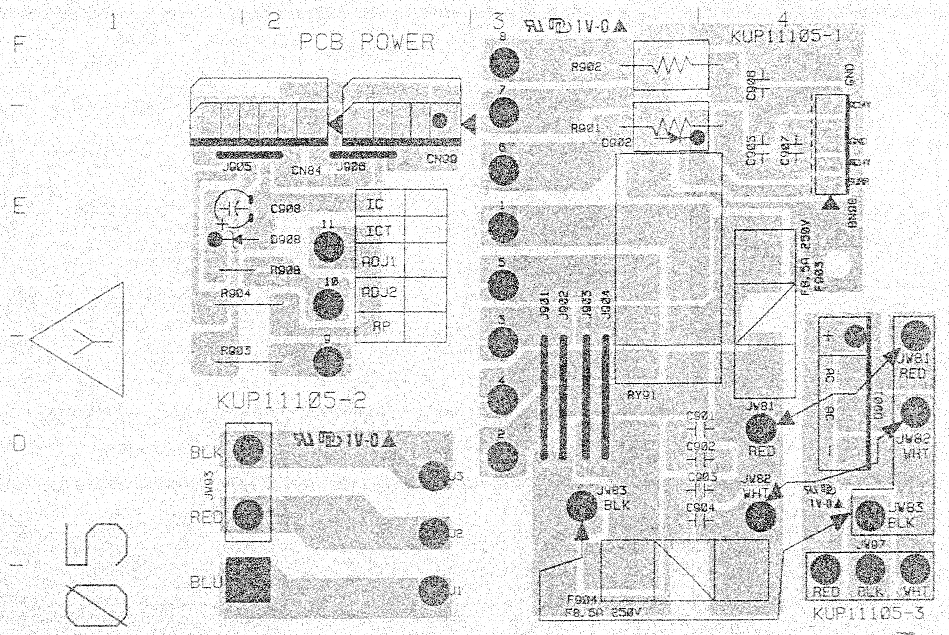
KUP11076 Y PCB AMP

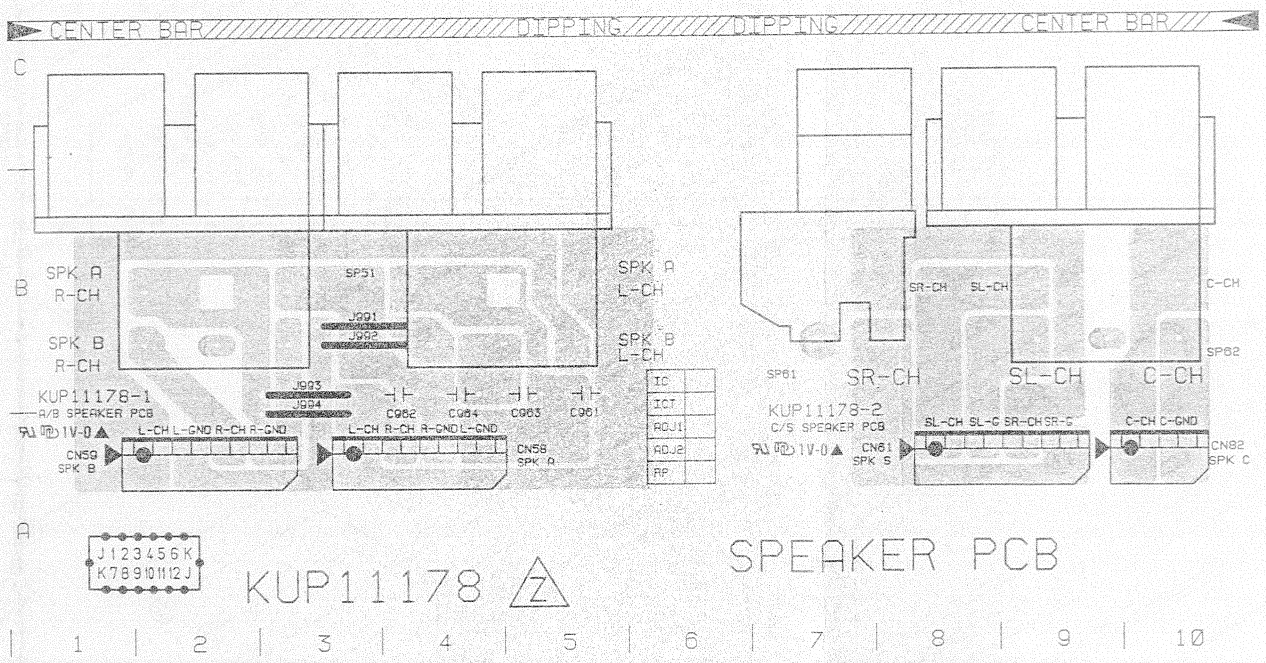
AREA	VOLT	J1	J2	J3 J4	J5 J8	T901 T902	TW91	SW92 JW84~9	F901	F902	R921
KOR	220V	O	X	X	O	X	O	X	O	X	X
UK	230V	O	X	X	O	O	X	X	O	X	X
EUR	230V	O	X	X	O	X	O	X	O	X	X
USA	120V	X	O	O	X	X	O	X	X	O	O
ASIA	230V 120V	X	X	X	X	X	O	O	O	O	O


L-CH
R-CH
C-CH
SL-CH
SR-CH
SPEAKER A
SPEAKER B
SP52: AA-V1200(ARY-3200)
BN59: PRO-450
SP61: AA-V1200 ARY-3200
BN80: PRO-450
BN81: PRO-450
80V 8200uF
80V 8200uF
25V 2200uF
25V 2200uF
AC(N)
AC(L)
BLK
RED
BLUE
BLACK
F901 T 4A L 250V
F902 T 6.3A L 250V
KUP11076-1
KUP11076-2
PRO-450: NOT USED
KUP11076-3
DS2-V-0
C-BAR
NJM4558L
MC7812
MC7912
+12V
-12V
C4370A
A1658A
AA-V1200: 7P
PRO-450: 8P
R-CH
L-CH

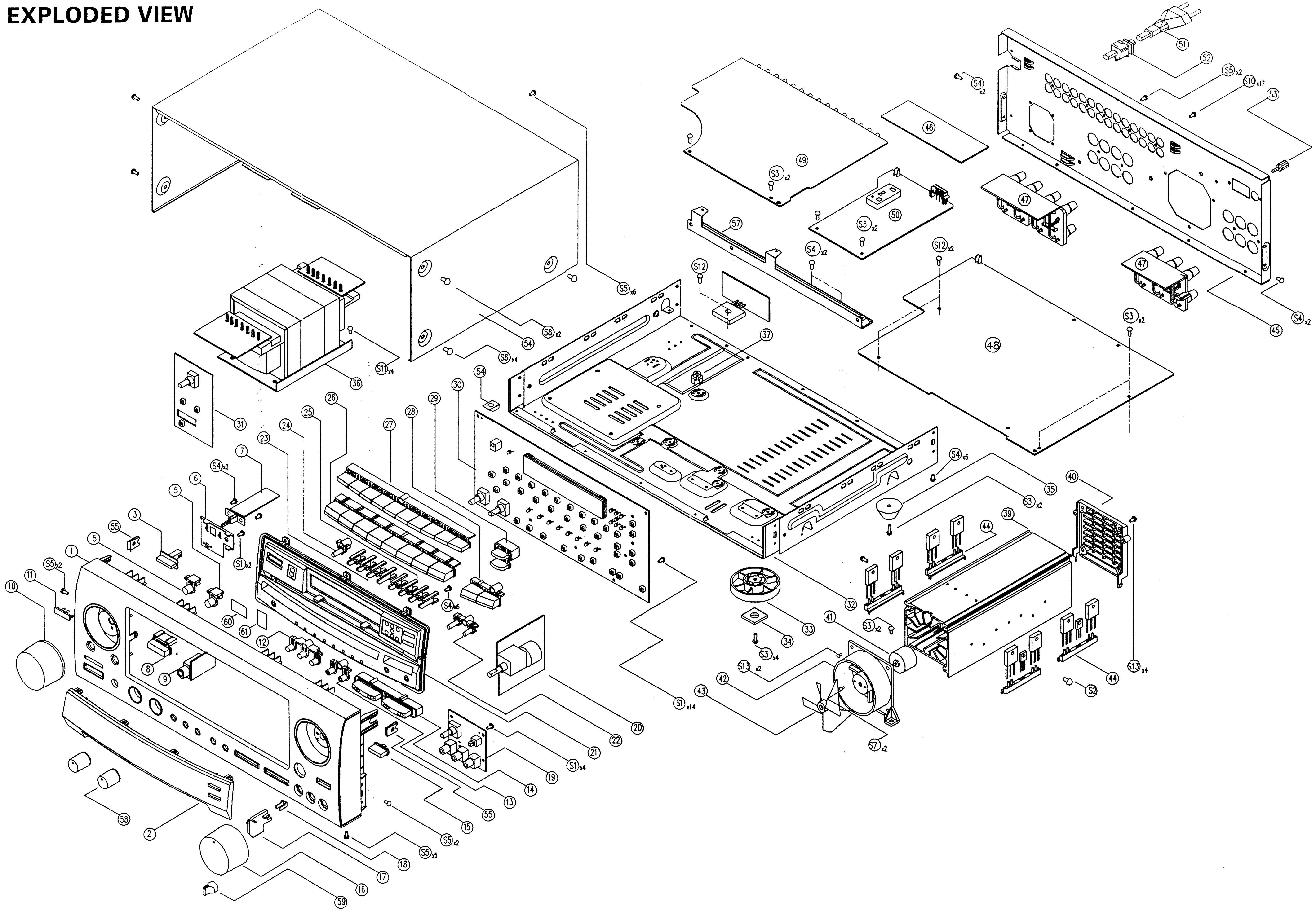

RED/WHT 8P
PHONO
CD
R/D
TAPE1
P/B
TAPE2
RED/WHT 4P
AV1
OUTPUT
INPUT
FRONT
DVD REAR
BLACK 4P
PREOUT
CENTER S.WOOFER
YELLOW 4P
AV-1 IN OUT
MONITOR OUT
DVD/AV-3 IN
NJU7313AL
NJU7311AL
NJU7312AL
NJM2279D
KIC9299P
IC ICT ADJ1 ADJ2 RP
R-CH
L-CH
DS2-V-0
KUP11221-1
CENTER BAR
DOLBY PRO LOGIC SURROUND PART
IC31 NJW1103F M62460FP
TO TUNER BN21
FROM FRONT CN10
BN32 TO AMP
CN82 FROM FRONT
BN31 TO VOLUME
CN54 FROM AMP
P.MUTE -5.6V GND +5.6V
VIDEO 2 (P/B)
CN48 FROM FRONT
KUP11221-2 AC OUTLET PCB
F905 T2.5A L 250V
BLK RED
KUP11221
INPUT PCB
1
2
3
4
5
A
B
C
D


KUP11074 Z
(JXXX): 3BAND ERASE
* MARK: 3BAND ONLY
FM FRONT END PACK
EUR: FTA4400H
KOR: FTA4500H
UL : FTA3500HA
IC ICT ADJ-1 ADJ-2 RP
CENTER BAR
ROS PART
FROM INPUT
FROM AMP
FROM FRONT
1V-0
KUP11074
A B C D E F
1 2 3


PCB POWER
KUP11105-1
KUP11105-2
KUP11105-3
1V-0
Y
05
IC ICT ADJ1 ADJ2 RP
F08.5A 250V
F004 F0.5A 250V
JW01 RED
JW02 WHT
JW03 BLK
BLK RED BLU
RED BLK WHT
D E F
1 2 3 4


CENTER BAR
DIPPING
DIPPING
CENTER BAR
SPK A R-CH
SPK B R-CH
SPK A L-CH
SPK B L-CH
KUP11178-1
A/B SPEAKER PCB
KUP11178-2
C/S SPEAKER PCB
SR-CH SL-CH C-CH
IC ICT ADJ1 ADJ2 RP
J123456K
K789101112J
KUP11178 Z
SPEAKER PCB
A B C
1 2 3 4 5 6 7 8 9 10

EXPLODED VIEW



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(51)
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S1x2
S1x4
S1x14
S2
S3x2
S3x4
S4x2
S4x5
S4x6
S5x2
S5x5
S5x6
S6x4
S8x2
S10x17
S11x4
S12
S12x2
S13x2
S13x4

EXPLODED VIEW

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
1	9A07333500	PANEL , FRONT	KGW1A221QH10
2	9A07333300	WINDOW , FIP	KGU1A174A5T
3	9A06783600	KNOB,POWER (PUSH)	KBC1A095
4		*VACANT*	
5	9A07045500	KNOB , TAPE	KBT1A506
6	9A07067800	BRACKET,POWER	KMD1A363
7	9A07336100	POWER PCB ASS'Y	KOP11105E
8	9A06777500	KNOB,POWER	KBT2A450
9		PHONES PCB ASS'Y	
10	9A07045100	KNOB , FUNCTION	KBN1A082K76
11	9A07047400	BADGE	KGB1A056H12
12	9A07046200	KNOB ,SPEAKER	KBT1A513
13	9A07045300	KNOB , TONE	KBT1A504
14	9A07046300	KNOB , DELAY	KBT1A514
15	9A07044900	KNOB , LOUDNESS	KBC1A100
16	9A07045000	KNOB , VOLUME	KBN1A073K76
17	9A06754100	INDICATOR,VOL	KGL1A129
18	9A06754600	FIXER,VOL	KMD1A353
19		JACK PCB ASS'Y	
20		VOLUME PCB ASS'Y	
21	9A07333200	ORNAMENT , KNOB	KGR1A128TK66
22	9A07046100	KNOB , MEMORY	KBT1A512
23	9A07047600	INDICATOR , LED (R)	KGL1A142
24	9A07045600	KNOB , CENTER	KBT1A507
25	9A07047700	INDICATOR , LED (L)	KGL1A146
26	9A07332900	KNOB , SURROUND	KBT1A511V
27	9A07045900	KNOB , PRESET	KBT1A510Z
28	9A07045800	KNOB , TUNING	KBT1A509Z
29	9A07045700	KNOB , BAND	KBT1A508
30	9A07336300	FRONT PCB ASS'Y	KOP11212B
31		ENDLESS PCB ASS'Y	
32	9A07053600	CHASSIS , BOTTOM	KUA1A160
33	9A05891400	FOOT,FRONT	KKL1A042H11
34	9A06754800	RUBBER,CUSHION	KHG1A050
35	9A06755300	FOOT,RUBBER (BLACK)	KKL1A012
36	9A07335500	TRANS , MAIN	KLT5V015ZE
37	9A01375500	PCB HOLDER	KHE170
38		MAIN PCB ASS'Y	
39	9A07051400	SINK , HEAT	KMY1A123
40	9A07047800	COVER , HEAT SINK	KGP2A015
41	9A06679000	MOTOR	BDMMDN4RB4MRC
42	9A07047900	FRAME , FAN	KGP2A016
43	9A06678800	FAN	KDD1A013
44	9A07051100	SUPPORT , TR	KMH1A069Z
45	9A07335300	PANEL , REAR	KKF3A164XK1
46	9A07336100	OUTLET PCB ASS'Y	KOP11105E
47	9A07336200	SPEAKER PCB ASS'Y	KOP11178B
48	9A07335900	AMP PCB ASS'Y	KOP11076G
49	9A07336000	INPUT PCB ASS'Y	KOP11077F
50	9A07335800	TUNER PCB ASS'Y	KOP11074H
51 ⚠	9A07332400	CORD , POWER	BJA2B034Z
52 ⚠	9A06754900	BUSHING,AC CORD	KHR1A028
53	9A05917200	GROUND TERMINAL	KMA2A001
54	9A07049800	CABINET , TOP	KKC1B091S1
55		RUBBER	KHC1A113
56	9A03741300	U-NUT	KNE4060
57	9A07335600	BRACKET , PCB	KMD1A379
58	9A07045200	KNOB , BASS	KBN1A083Z
59	9A06752800	KNOB,BALANCE	KBN1A072
60	9A04876400	FILTER,REMOCON	KGU1A026
61	9A07048500	SHEET , LED (S)	KGX1A251Z

EXPLODED VIEW

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
⚠	9A05990700	FUSE F2.5A	KBA2C2500TLE
⚠	9A06784200	FUSE,KBA2C4000TLE	KBA2C4000TLE
⚠	9A07332800	FUSE	KBA2C8500NMU
S1	9A01377400	SCREW,KTB3+10G	KTB3+10G
S2		SCREW,KTB3+14J	KTB3+14J
S3	9A05339200	SCREW KTW3+8J	KTW3+8J
S4	9A01532600	SCREW KTB3+6J	KTB3+6J
S5	9A01377200	SCREW KTB3+8JFZ	KTB3+8JFZ
S6	9A05984300	SCREW KTB4+6FFZ	KTB4+6FFZ
S7		SCREW,KTN2+6F	KTN2+6F
S8	9A05338700	SCREW, KTB4+10JFZ	KTB4+10JFZ
S9	9A01377600	SCREW,KTWS3+10G	KTWS3+10G
S10	9A01377300	SCREW,KTB3+10GFZ	KTB3+10GFZ
S11		SCREW KTB4+6F	KTB4+6F
S12	9A05339100	SCREW KTW3+12J	KTW3+12J
S13	9A01377400	SCREW,KTB3+10J	KTB3+10J

INCLUDED ACCESSORIES

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
	9A04883100	ANT,FM WIRE	KSA1A007
	9A05338400	AM LOOP ANT ASS'Y	KSA1A008Z
	9A07125300	OWNER'S MANUAL , E/F/G/I/S AG-D9000	KQX1A492Z
	9A07332700	REMOCON XMTR ASSY(UR-414)	KARTAGD9000

■ PARTS LIST

ATTENTION

1. When placing an order for parts, be sure to list the Part No., Model No, and the description of each part. Otherwise, the non-delivery of the part or the delivery of a wrong part may result.
2. Please make sure that Part No. is correct when ordering. If not, a part different from the one you ordered may be delivered.
3. Since the parts shown in Parts List of Preliminary Service Manual may have been the subject of changes, plaese use this Parts List for all future reference.

HOW TO USE THIS PARTS LIST

1. This Parts List lists those parts which are considered necessary for repairs. Other common parts, such as resistors and capacitors, are listed in the "Common List for Service Parts" from which these parts should be selected and stocked.
2. Parts not shown in the Parts List and "Common List for Service Parts" will not in principle be supplied.
3. How to rear the Parts List.

■ RESISTORS AND CAPACITORS

Notes :
- Part numbers are indicated for most mechanical parts. Please use this part number for parts order.
- IMPORTANT SAFETY NOTICE. Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacture's specified parts.
- The unit of resistance is OHM(Ω) K=1000(Ω), M=1000(KΩ)
- The unit of capacitance is MICROFARED(µF) $P=10^{-6}\mu F$

■ Numbering System of Resistor

Example

KRD	25	F	J	101
Type	Wattage	Shape	Tolerance	Value

Resistor Type	Wattage	Tolerance
KRD: Carbon	20:1/5W	F:= ±1%
KRG: Metal Oxide	25:1/4W	J:= ±5%
	50:1/2W	K:= ±10%
	1:1W	
KRF:Metal Cement	2:2W	
	3:3W	

■ Numbering System of Capacitor

Example

KCKR	1H	101	K	B
Type	Voltage	Value	Tolerance	Peculiarity

Capacitor Type	Voltage		Tolerance
	ECEA Type	Other	
KCB:Ceramic	0J:6.3V	1H:50V DC	C: ±0.25pF
KCC:Ceramic	1A:10V	1:125V DC	G: ±2%
KCK:Ceramic	1C:16V	KC:400V AC	J: ±5%
KCQI:Polyester	1E:25V		K: ±10%
KCQP:Polypropylene	1H:50V		Z: +80%, -20%
KCQS:Polystyrol	1V:35V		

WARNING

⚠(*) INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURE'S RECOMMENDED PARTS.

AVERTISSEMENT

⚠(*) IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉDE L'APPAREIL, NE REMPLACER QUE DES PIÉCES RECOMMANDEES PAR LÉ FABRICANT.

AMP PCB ASS'Y

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
	9A07335900	AMP PCB ASS'Y	KOP11076G
	9A07366900	AMP PCB	KUP11076Y
	9A05328200	HOLDER,FUSE KJCFC5S	KJCFC5S
	9A06678800	FAN	KDD1A013
	9A06679000	MOTOR	BDMMDN4RB4MRC
C911.912 ⚠	9A06759400	CE, 8200UF V 25V DC	KCET80V822N
C922 ⚠	9A06226700	CE, 1000UF H 25V DC	KCEA1EH102E
C941.942 ⚠	9A05976300	C.,2200UF/35V	KCEA1EH222E
D509.510 ⚠	9A06765100	D, MTZJ27BT	KVDMTZJ27BT
D525.526 ⚠	9A06765100	D, MTZJ27BT	KVDMTZJ27BT
D527-530	9A01390500	DIODE,1N4148MT	KVD1N4148MT
D545-550	9A01390500	DIODE,1N4148MT	KVD1N4148MT
D566	9A01390500	DIODE,1N4148MT	KVD1N4148MT
D613-615 ⚠	9A06765100	D, MTZJ27BT	KVDMTZJ27BT
D637-639 ⚠	9A06765100	D, MTZJ27BT	KVDMTZJ27BT
D640-645	9A01390500	DIODE,1N4148MT	KVD1N4148MT
D667-668	9A01390500	DIODE,1N4148MT	KVD1N4148MT
D697	9A01390500	DIODE,1N4148MT	KVD1N4148MT
D921.922 ⚠	9A05194600	DIODE,1N4003SRT	KVD1N4003SRT
D923 ⚠	9A06236200	DIODE,ZENER MTZJ6.2BT	KVDMTZJ6.2BT
D923 ⚠	9A06236200	DIODE,ZENER MTZJ6.2BT	KVDMTZJ6.2BT
D924 ⚠	9A01390500	DIODE,1N4148MT	KVD1N4148MT
D931.932 ⚠	9A05194600	DIODE,1N4003SRT	KVD1N4003SRT
D935 ⚠	9A05193800	DIODE,ZENER MTZJ33BT	KVDMTZJ33BT
D941-944 ⚠	9A05194600	DIODE,1N4003SRT	KVD1N4003SRT
D949.950 ⚠	9A06236200	DIODE,ZENER MTZJ6.2BT	KVDMTZJ6.2BT
D971.972 ⚠	9A01390500	DIODE,1N4148MT	KVD1N4148MT
D973.975	9A01390500	DIODE,1N4148MT	KVD1N4148MT
D977.978	9A01390500	DIODE,1N4148MT	KVD1N4148MT
D984.985	9A01390500	DIODE,1N4148MT	KVD1N4148MT
D994.995	9A01390500	DIODE,1N4148MT	KVD1N4148MT
D996.998	9A01390500	DIODE,1N4148MT	KVD1N4148MT
IC51	9A06760100	IC, NJM4556AL	BVINJM4556AL
IC52.61	9A07043700	I.C NJM4558L	BVINJM4558L
IC62	9A07043700	I.C NJM4558L	BVINJM4558L
IC95 ⚠	9A05196000	IC,KA7812-ABTU	KVIMC7812C
IC96 ⚠	9A05988200	IC.,MC7912C	KVIMC7912C
L541.542	9A06760400	COIL,SPEAKER	KLR9Y004Z
L661-663	9A06760400	COIL,SPEAKER	KLR9Y004Z
PWR2 ⚠	9A07335400	TRANS . SUB	KLT5J029ZW
Q503-506	9A06236700	TR,KTC3200GRT	KVTKTC3200GRT
Q513-516	9A06236700	TR,KTC3200GRT	KVTKTC3200GRT
Q523.524	9A06765500	TR,KTA1275YT	KVTKTA1275YT
Q525.526	9A06765600	TR,KTC3228YT	KVTKTC3228YT
Q529.530	9A06676000	TR KTD2058Y	KVTKTD2058Y
Q531.532	9A06760500	TR, KTC4370AY	KVTKTC4370AY
Q533.534	9A06760600	TR, KTA1659AY	KVTKTA1659AY
Q537.538	9A06768700	TR, 2SC3856	BVT2SC3856
Q539.540	9A06768800	TR, 2SA1492	BVT2SA1492
Q545.546 ⚠	9A03745100	TR,KSA1175-YTA	KVTKSA1175YT
Q559.560	9A05197500	TR,KTD1302T	KVTKTD1302T
Q565	9A06066800	TR,DTC144EST	KVTDTC144EST
Q566	9A06066900	TR,DTA144EST	KVTDTA144EST
Q583-586	9A05197500	TR,KTD1302T	KVTKTD1302T
Q598.599	9A05197500	TR,KTD1302T	KVTKTD1302T
Q604-609	9A06236700	TR,KTC3200GRT	KVTKTC3200GRT
Q619-624	9A06236700	TR,KTC3200GRT	KVTKTC3200GRT
Q621-624	9A06236700	TR,KTC3200GRT	KVTKTC3200GRT
Q634-636	9A06765500	TR,KTA1275YT	KVTKTA1275YT
Q637-639 ⚠	9A06765600	TR,KTC3228YT	KVTKTC3228YT
Q643-645	9A06676000	TR KTD2058Y	KVTKTD2058Y
Q646-648	9A06760500	TR, KTC4370AY	KVTKTC4370AY
Q649-651 ⚠	9A06760600	TR, KTA1659AY	KVTKTA1659AY
Q655-657 ⚠	9A06768900	TR, 2SC4468	BVT2SC4468
Q658-660	9A06769000	TR, 2SA1695	BVT2SA1695
Q667-669	9A03745100	TR,KSA1175-YTA	KVTKSA1175YT
Q678	9A06066800	TR,DTC144EST	KVTDTC144EST
Q697-700	9A05197500	TR,KTD1302T	KVTKTD1302T
Q923	9A05196800	TR,KSC2316-Y-SHTA	KVTKSC2316YT
Q925 ⚠	9A03745000	TR,KSC2785-YTA	KVTKSC2785YT
Q935 ⚠	9A05197200	TR,KTA1271YT	KVTKTA1271YT
Q949 ⚠	9A01388300	TR,KSD288-Y-AB	KVTKSD288Y
Q950 ⚠	9A01388400	TR,KSA614-Y	KVTKSA614Y
Q967.968	9A03745000	TR,KSC2785-YTA	KVTKSC2785YT

AMP PCB ASS'Y

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
Q969	9A06066900	TR,DTA144EST	KVTDTA144EST
Q972	9A06066800	TR,DTC144EST	KVTDTC144EST
Q974.975	9A06066900	TR,DTA144EST	KVTDTA144EST
Q976-978	9A06066800	TR,DTC144EST	KVTDTC144EST
Q984.985	9A03745000	TR,KSC2785-YTA	KVTKSC2785YT
Q986	9A06066900	TR,DTA144EST	KVTDTA144EST
Q987	9A05197200	TR,KTA1271YT	KVTKTA1271YT
Q991-993	9A06066900	TR,DTA144EST	KVTDTA144EST
Q994-998	9A06066800	TR,DTC144EST	KVTDTC144EST
R509.510 ⚠	9A07053300	RES , METAL OXIDE FILM	KRG1ANJ562H
R537-540 ⚠	9A06677400	RES CEMENT 5EKR22	KRF5EKR22 0,22 KΩ 5W
R541.542 ⚠	9A05979000	R.,4.7-OHM,2W	KRG2ANJ4R7H
R543.544 ⚠	9A05338000	R,METAL OXIDE FILM 1W 10	KRG1ANJ100H
R613-615 ⚠	9A07053300	RES , METAL OXIDE FILM	KRG1ANJ562H
R655-660 ⚠	9A06677400	RES CEMENT 5EKR22	KRF5EKR22
R661-663 ⚠	9A05979000	R.,4.7-OHM,2W	KRG2ANJ4R7H
R664-666 ⚠	9A05338000	R,METAL OXIDE FILM 1W 10	KRG1ANJ100H
RY51.52	9A04879000	RELAY,OSA-SS-212DM3	BSL4A004ZU
RY53	9A06677200	RELAY	KSL4B003ZW
RY61	9A05987100	RELAY HR-CR7-DC12V	KSL1A007ZE
RY62	9A04879000	RELAY,OSA-SS-212DM3	BSL4A004ZU
RY92 ⚠	9A05987100	RELAY HR-CR7-DC12V	KSL1A007ZE
SW98	9A06671200	SW.TACT EVQ21505R	BST1A014ZT

TUNER PCB ASS'Y

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
	9A07335800	TUNER PCB ASS'Y	KOP11074H
	9A07337000	PCB , TUNER	KUP11074Z
D102.103	9A01390500	DIODE,1N4148MT	KVD1N4148MT
D180	9A01390500	DIODE,1N4148MT	KVD1N4148MT
CT11	9A01405900	C,VARIABLE 20PF A020S12	KCRA020S12
C106	9A01507300	C,SEMI-CON 470PF/50V	KCQS1H471JZ
Q107.108	9A03745000	TR,KSC2785-YTA	KVTKSC2785YT
IC11	9A04323300	IC,LM7001	BVILM7001
L101	9A04875000	COIL,FILTER	KLA4Y106Z
JK11	9A04875900	TERMINAL,ANT	KJJ3S006Z
S101	9A04882400	SW,TACT	KST1A010Z
L108.109	9A04883400	COIL,	KLQB542KLZ
Q112	9A05196400	TR,DTA114YST	KVTDTA114YST
Q181	9A05196400	TR,DTA114YST	KVTDTA114YST
Q111	9A05196500	TR,DTC114YST	KVTDTC114YST
Q113.114	9A05196500	TR,DTC114YST	KVTDTC114YST
Q105.106	9A05197300	TR,KTC3192OT	KVTKTC3192OT
VR11	9A05317400	R,SEMI FIXED EVNDJAA03B15	BVN1PA103B01T
VR12	9A05317700	VR, SEMI FIX EVNDJAA03B24	BVN1PA203B01T
L105	9A05332500	COIL , AM OSC 2B008Z	KLO2B008Z
L107	9A05332600	COIL A183KWCZ	KLQA183KWCZ
FE11	9A05938700	TUNER,PACK	KNVFTA4460H
T100	9A05939400	IFT,AM	KLI2B103-G
L104	9A06259900	COIL , AM ANT2	KLA2C005
CF11.12	9A06544600	CERAMIC,FILTER	BVFE107MSHAT
T101	9A06762200	I.F.T,FM B028Z	KLI3B028Z
X101	9A06762300	CRYSTAL 07200D320C	BOX07200D320C
X102	9A06762400	RESONATOR,CERAMIC	BVFZTB456F11
X103	9A06762500	FILTER,CERAMIC	BVFLZU450C4N
D101	9A06767400	D, SVC342LT	BVDSVC342LT
IC12	9A06767500	IC, LA1836M	BVILA1836M
X180	9A06785200	CRYSTAL,BOX04332A200C	BOX04332A200C
IC18	9A06786600	IC, TDA7330BD	BVITDA7330BD
CF21	9A07006300	FILTER CERAMIC	BVFPFB450JR3
BPF1	9A07337800	B.P.F GFMB3	KVFGFMB3

INPUT PCB ASS'Y

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
	9A07367000	INPUT PCB ASS'Y	KOP11221B
	9A07367900	INPUT PCB	KUP11221Z
D302.303	9A01390500	DIODE,1N4148MT	KVD1N4148MT
D481-484	9A01390500	DIODE,1N4148MT	KVD1N4148MT
Q481.482	9A05196400	TR,DTA114YST	KVTDTA114YST
Q301	9A05196800	TR,KSC2316-Y-SHTA	KVTKSC2316YT
Q203.204	9A05197500	TR,KTD1302T	KVTKTD1302T
Q207.208	9A05197500	TR,KTD1302T	KVTKTD1302T
OL91	⚠ 9A05895700	OUTLET,AC	BJJ7A003Z
D301	⚠ 9A06236200	DIODE,ZENER MTZJ6.2BT	KVDMTZJ6.2BT
L302	9A06673700	COIL,AXAIL	KLQ02C221JT
IC24	9A06674500	IC NJU7312L	BVINJU7312L
IC48	9A06760200	IC, NJM2279D	BVINJM2279D
IC23	9A06761700	IC, NJU7313L	BVINJU7313L
X301	9A06762600	RESONATOR,CERAMIC	BVFZTA4.00MG
L301	9A06767700	COIL,AXAIL	KLQ0599J471T
L302	9A06673700	COIL,AXAIL	KLQ02C221JT
IC21	9A07043700	I.C NJM4558L	BVINJM4558L
IC25	9A07043700	I.C NJM4558L	BVINJM4558L
IC32,33	9A07043700	I.C NJM4558L	BVINJM4558L
IC22	9A07044100	I.C NJU7311L	BVINJU7311L
JK26	9A07334400	JACK , IN/OUT(Y/Y/E,S)	KJJ4P020Y
JK25	9A07334500	JACK , IN/OUT(B/B,S)	KJJ4P023Z
JK22	9A07334700	JACK , IN/OUT(R/W,S)	KJJ4R015Z
JK24	9A07334700	JACK , IN/OUT(R/W,S)	KJJ4R015Z
IC34,35	9A07367600	IC, VOLUME	KVIKIC9299P
JK21	9A07367700	JACK, IN/ONU(R/W,S,E)	KJJ4R023Z
JK23	9A07367800	JACK, IN/ONU(R/W,S,E)	KJJ4P034Z
IC31	9A07368000	IC,DOLBY M62460FP	BVIM62460FP

FRONT PCB ASS'Y

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
	9A07336300	FRONT PCB ASS'Y	KOP11212B
	9A07337500	FRONT PCB	KUP11212Z
C836	9A05316600	CAP,GOLD EECS5R5V104	BCES5R5V104
D801	9A05195000	LED,RED SLR342VCF02	KVD342VCF02T085
D802-805	9A05194900	LED,GREEN SLR342MCF02	KVD342MCF02T085
D806-808	9A05890300	LED,YELLOW SLR342YCF02	KVD342YCF02T085
D809	9A05194900	LED,GREEN SLR342MCF02	KVD342MCF02T085
D820-823	9A01390500	DIODE,1N4148MT	KVD1N4148MT
EC81	9A06224700	VR , ENCODOR EC16B1210	BSR2A006Z
FIP1	9A06757800	F.I.P	KFL10BT-195GK
IC71-73	9A07043700	I.C NJM4558L	BVINJM4558L
IC81	9A06786000	IC, TMP87PM78F	BVITMP87PM78F
IC82	9A07332500	IC, NJU3713D	BVINJU3713D
JK41-43	9A06758100	JACK,VCR	KJJ4M023Z
JK71	9A06758000	JACK,HEAD PHONE	BJJ2E020Z
L801	9A05356900	COIL , AXAIL 10UH,K	KLQ02C100KT
Q702	9A05197500	TR,KTD1302T	KVTKTD1302T
Q801	9A06066900	TR,DTA144EST	KVTDTA144EST
Q804.805	9A06066900	TR,DTA144EST	KVTDTA144EST
Q806.810	9A06067000	TR,DTC144TST	KVTDTC144TST
Q809.819	9A06066900	TR,DTA144EST	KVTDTA144EST
Q811	9A03747300	TR,KSB811-YTA	KVTKSB811YT
Q812.813	9A05196500	TR,DTC114YST	KVTDTC114YST
Q815.816	9A03811700	TR,KSD1021-YTA	KVTKSD1021YT
Q817.818	9A03747300	TR,KSB811-YTA	KVTKSB811YT
Q820-822	9A05196500	TR,DTC114YST	KVTDTC114YST
RS81	9A06757900	IC,PNA4612M00HB	BRVPNA4612M00HB
RZ81	9A07336800	RES , NETWORK	BVVFB01B104Z
RZ82	9A05358800	R, NET WORK SN7X103J	KRGSN7X103J
S801-825	9A06671200	SW.TACT EVQ21505R	BST1A014ZT
S827-830	9A06671200	SW.TACT EVQ21505R	BST1A014ZT
S832-835	9A06671200	SW.TACT EVQ21505R	BST1A014ZT
S837-840	9A06671200	SW.TACT EVQ21505R	BST1A014ZT
SW71	9A05385600	SW,PUSH(VERTICAL)	KSH2B003Z
SW91	9A06784700	SW, PUSH (MOMS)	KSH1A001ZV
VR71	9A07332600	RES , VARIABLE	BVVFB01B104Z
VR72	9A06758500	RES,VARIABLE	BVV1U01W104Y
VR73.74	9A06862100	RES,VARIABLE 01C104Y	BVV2X01C104Y
X801	9A05193000	CRYSTAL, 08000E160C	KOX08000E160C

POWER PCB ASS'Y

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
	9A07336100	POWER PCB ASS'Y	KOP11105E
	9A07337300	PCB , POWER	KUP11105Y
	9A05328200	HOLDER,FUSE KJCFC5S	KJCFC5S
D901	⚠ 9A06759900	D, KBU804F	BVDKBU804F
D902	⚠ 9A01390500	DIODE,1N4148MT	KVD1N4148MT
D908	⚠ 9A06236200	DIODE,ZENER MTZJ6.2BT	KVDMTZJ6.2BT
R901.902	⚠ 9A06760900	R,FUSE 0.47 J 1W	KRQ1AJR47H
RY91	9A06677200	RELAY	KSL4B003ZW

SPEAKER PCB ASS'Y

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
	9A07336200	SPEAKER PCB ASS'Y	KOP11178B
	9A07337400	PCB , SPEAKER	KUP11178Z
SP61	9A07334800	TERMINAL , SPEAKER	KJJ5N004Z
SP62	9A07334900	TERMINAL , SPEAKER	KJJ5P012Z
SP51	9A07335000	TERMINAL , SPEAKER	KJJ5Q006Z